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A PROJECT REPORT

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS OF

THE DEGREE OF

BACHELOR OF COMPUTER APPLICATIONS

BY

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NORTH EASTERN HILL UNIVERSITY



CERTIFIED THAT THIS IS A BONAFIDE RECORD OF THE PROJECT

ENTITLED
QUIZ APP GAME

Submitted for the partial fulfillment for the award of degree of

BACHELOR OF COMPUTER APPLICATIONS (BCA)

By

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Reg. Number: 9504 of 2012-13

GUIDE

A handwritten signature in blue ink, which appears to read "Nicholas".

Mr. Nicholas Jyrwa

HEAD OF DEPARTMENT

A handwritten signature in blue ink, which appears to read "Aiom".

Mrs. Aiom Mitri

EXAMINER

Acknowledgement

Firstly, I owe my debt of gratitude to God for his blessings who imparted in me with wisdom and cherished values, in my entire endeavors in making this project a successful one.

I would like to acknowledge all the teaching staff of Shillong College Computer Department, especially Sir Nicholas Jyriwa (guide), my family and my friends. Without them I would not have achieved this task.

GOD BLESS YOU ALL

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SYNOPSIS

PROJECT NAME: QUIZ GAME

Objectives:

This is a quiz game with minimum 10 questions for each subject that is COMPUTER, MATHS, SCIENCE and GENERAL KNOWLEDGE

- It enriches the general knowledge about various topics.
- It is a perfect example for everyone to learn about general knowledge through game because it make life interesting by learning through game
- It is easier to learn especially children because the question flow slowly ,when answer option select it display the correct answer on the screen itself

SYSTEM REQUIREMENT

Hardware:

- Processor: Intel(R)Celeron(R) etc
- Hardware:(minimum) 4GB RAM

Software:

- Operating System: Windows 8 etc

Programming: java language with android

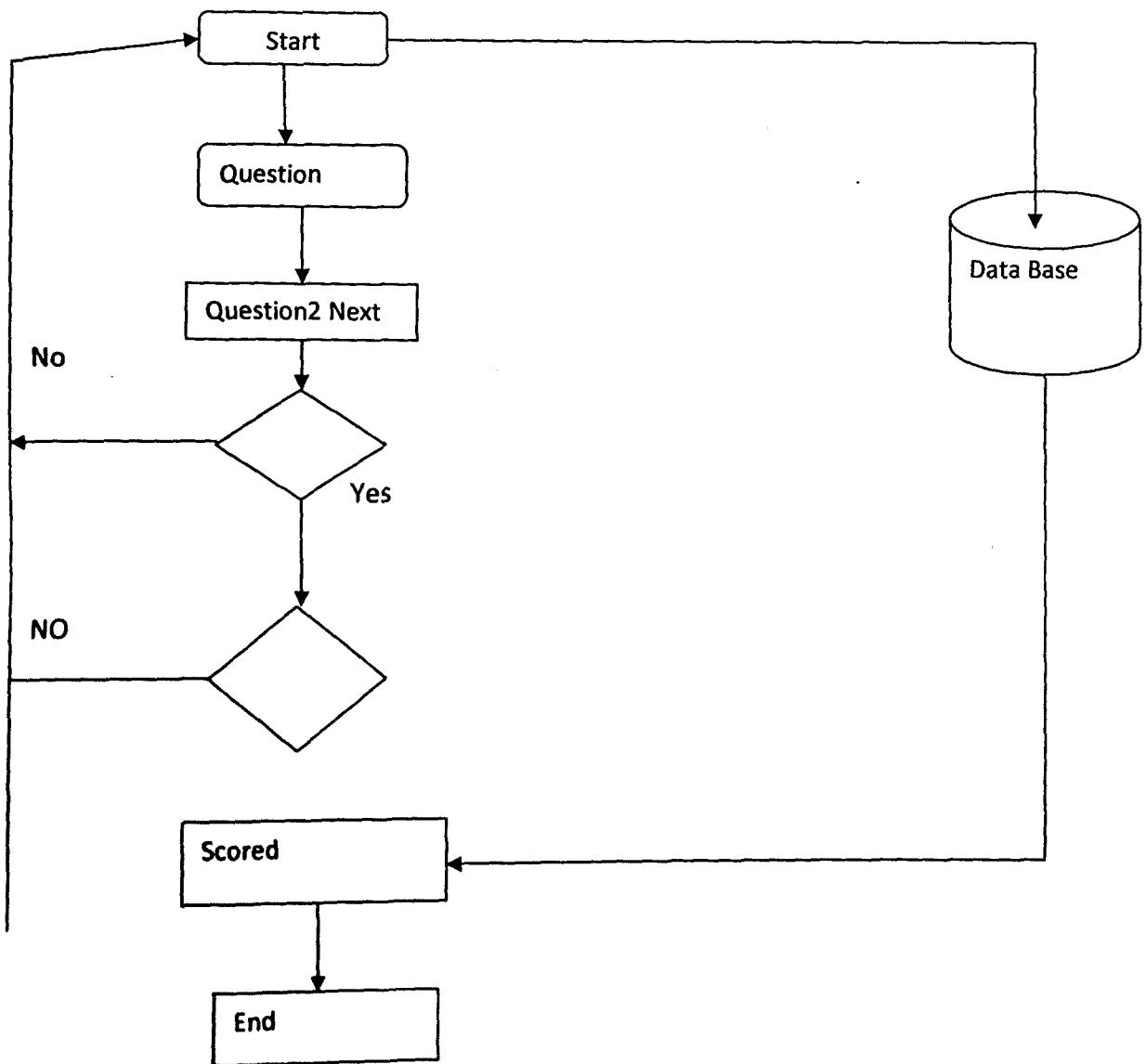
- Software: android studio as a tool

Proposed System

- This game has exist for some general knowledge that include all subjects and the question come randomly in any subject in one game
- In my proposal system, there are some more features to be added which has not been existed
- By keeping separate question according to the subject define name make easier to know the question belong to a particular subject
- Make easy to learn especially children because the questions flow slowly ,when answer option select it display the correct answer on the screen itself and it will go to next question only if the user want to go to the next.



FLOWCHART



Algorithm:

Store string value to a variable

If the correct option is chosen

Then

User can either continue or quit

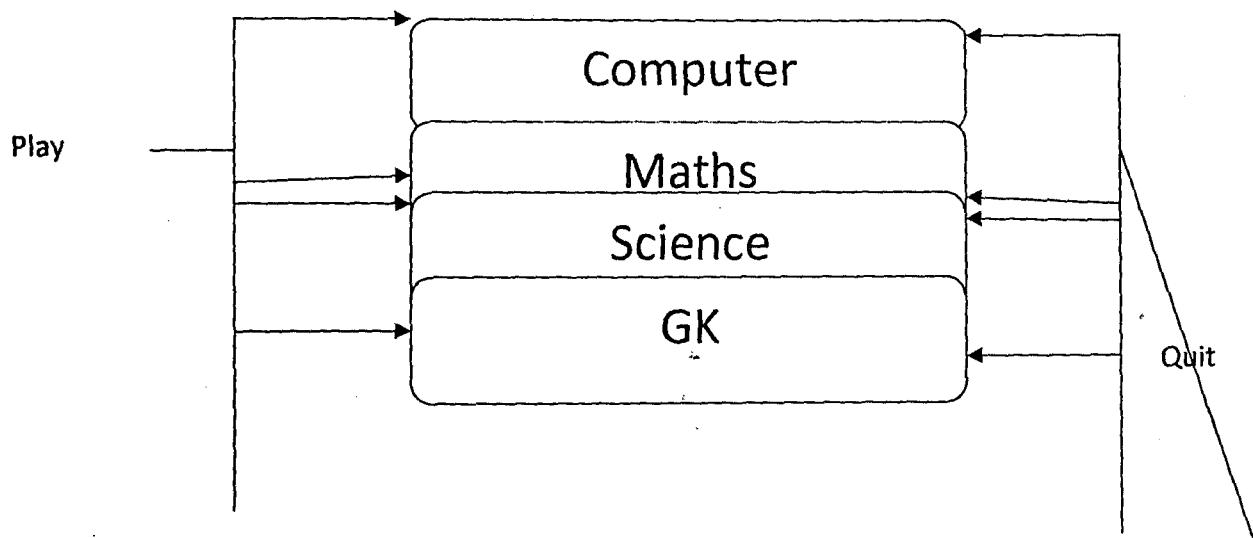
else

If user continues then keep playing until it comes to an end

Show the scoring point

MODULE DESIGN

Play Module



// Start with the Main activity ,all activities are linked together here

When the activity starts three things are done

1.Data is fetched from the database in a list

2.First question is displayed on the view

3.A score is initialized to zero

All of these is written in the onCreate() of the activity

Manifest

```
<?xml version="1.0" encoding="utf-8"?>
<manifest
    xmlns:android="http://schemas.android.com/apk/res/android"
        package="com.example.lorita.quizgame" >

    <application
        android:allowBackup="true"
        android:icon="@mipmap/c"
        android:label="@string/app_name"
        android:theme="@style/AppTheme" >
        <activity
            android:name=".MainActivity"
            android:label="@string/app_name" >
            <intent-filter>
                <action
                    android:name="android.intent.action.MAIN" />

                    <category
                    android:name="android.intent.category.LAUNCHER" />
                </intent-filter>
            </activity>
            <activity
                android:name=".MenuActivity"
                android:label="@string/app_name" >
            </activity>

            <activity
                android:name=".ComputerActivity"
                android:label="@string/title_activity_computer" >
            </activity>
```

```
<activity
    android:name=".CompResultActivity"
    android:label="@string/title_activity_result" >
</activity>

<activity
    android:name=".MathActivity"
    android:label="@string/title_activity_math" >
</activity>

<activity
    android:name=".MathResultActivity"
    android:label="@string/app_name"
    android:screenOrientation="portrait"/>

<activity
    android:name=".ScienceActivity"
    android:label="@string/title_activity_science" >
</activity>

<activity
    android:name=".ScienceResultActivity"
    android:label="@string/title_activity_result" >
</activity>

<activity
    android:name=".GkActivity"
    android:label="@string/title_activity_gk" >
</activity>

<activity
    android:name=".GkResultActivity"
    android:label="@string/title_activity_result" >
</activity>
</application>

</manifest>
```

// connect all button, radio button etc to perform action when clicked

```
package com.example.lorita.quizgame;

import android.app.Activity;
import android.content.Intent;
import android.os.Bundle;
import android.support.v7.app.ActionBarActivity;
import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
import android.widget.Button;
```

```
public class MainActivity extends Activity {  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_main);  
  
        Button startButton =  
(Button) findViewById(R.id.button);  
        startButton.setOnClickListener(new  
View.OnClickListener() {  
            @Override  
            public void onClick(View v) {  
                Intent intent = new Intent(MainActivity.this,  
MenuActivity.class);  
                startActivity(intent);  
            }  
        });  
    }  
}  
//design the first interface  
  
<RelativeLayout  
    xmlns:android="http://schemas.android.com/apk/res/android"  
    xmlns:tools="http://schemas.android.com/tools"  
    android:layout_width="match_parent"  
    android:layout_height="match_parent"  
    android:background="@drawable/bg"  
    tools:context=".MainActivity">  
  
    <Button  
        android:layout_width="wrap_content"  
        android:layout_height="wrap_content"  
        android:id="@+id/button"  
        android:layout_alignParentBottom="true"  
        android:layout_alignParentRight="true"  
        android:layout_alignParentEnd="true"  
        android:layout_marginRight="32dp"  
        android:layout_marginEnd="32dp"  
        android:background="@drawable/mbutton"  
        android:layout_marginBottom="48dp" />  
    </RelativeLayout>  
// menu aCTIVITY  
  
package com.example.lorita.quizgame;  
  
import android.app.Activity;  
import android.app.AlertDialog;  
import android.content.DialogInterface;  
import android.content.Intent;
```

```
import android.os.Bundle;
import android.view.View;
import android.widget.Button;

public class MenuActivity extends Activity implements
View.OnClickListener {

    Button computer,math,science,gk,exit;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_menu);

        computer=(Button)findViewById(R.id.bComputer);
        math=(Button)findViewById(R.id.bMath);
        science=(Button)findViewById(R.id.bScience);
        gk=(Button)findViewById(R.id.bGk);
        exit=(Button)findViewById(R.id.bExit);

        computer.setOnClickListener(this);
        math.setOnClickListener(this);
        science.setOnClickListener(this);
        gk.setOnClickListener(this);
        exit.setOnClickListener(this);
    }

    @Override
    public void onClick(View v) {

        switch (v.getId()){
            case R.id.bComputer:
                Intent iComputer=new
Intent(MenuActivity.this,ComputerActivity.class);
                startActivity(iComputer);
                break;

            case R.id.bMath:
                Intent iMath=new
Intent(MenuActivity.this,MathActivity.class);
                startActivity(iMath);
                break;

            case R.id.bScience:
                Intent iScience=new
Intent(MenuActivity.this,ScienceActivity.class);
                startActivity(iScience);
                break;

            case R.id.bGk:
        }
    }
}
```

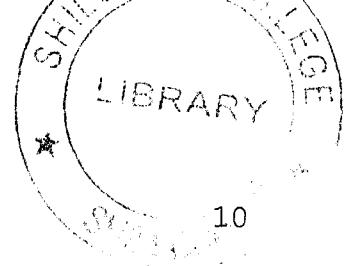
```
        Intent iGk=new
Intent(MenuActivity.this,GkActivity.class);
        startActivity(iGk);
        break;

    case R.id.bExit:
        AlertDialog.Builder alert=new
AlertDialog.Builder(this);
        alert.setMessage("Do You Want To Exit?");
        alert.setPositiveButton("Yes", new
DialogInterface.OnClickListener() {
            @Override
            public void onClick(DialogInterface
dialog, int which) {
                finish();
            }
        });
        alert.setNegativeButton("No", new
DialogInterface.OnClickListener() {
            @Override
            public void onClick(DialogInterface
dialog, int which) {
                dialog.cancel();
            }
        });
        alert.create().show();
        break;
    }

}

// Menu interface
<RelativeLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:layout_alignParentBottom="true"
    android:gravity="center_horizontal"
    android:background="@android:color/white"
    tools:context=".QuizActivity" >

    <TextView
        android:layout_width="250dp"
        android:layout_height="wrap_content"
        android:text="MENU"
        android:paddingTop="50dp"
        android:paddingLeft="90dp"
        android:textStyle="bold"
        android:id="@+id/textView1"
```



```
    android:textSize="40dp"
    android:textColor="#0b0bbe" />

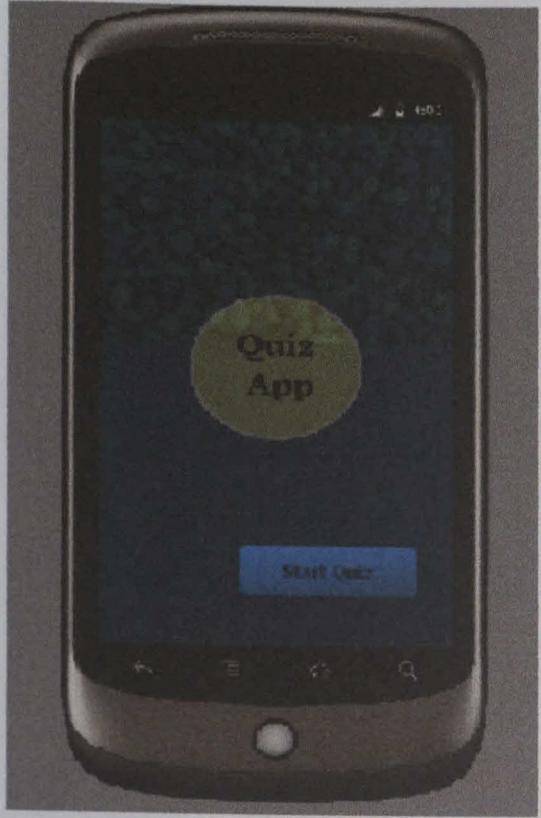
<LinearLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/textView1"
    android:id="@+id/linearLayout"
    android:orientation="vertical"
    android:paddingLeft="30dp"
    android:paddingTop="40dp">

    <Button
        android:id="@+id/bComputer"
        android:layout_width="226dp"
        android:layout_height="60dp"
        android:textStyle="bold"
        android:text="COMPUTER"
        android:textAlignment="center"
        android:textColor="@android:color/holo_red_dark"
        android:background="@drawable/bmenu"/>

    <Button
        android:id="@+id/bMath"
        android:layout_width="226dp"
        android:layout_height="60dp"
        android:text="MATH"
        android:textStyle="bold"
        android:textColor="@android:color/holo_red_dark"
        android:textAlignment="center"
        android:background="@drawable/bmenu"/>

    <Button
        android:id="@+id/bScience"
        android:layout_width="226dp"
        android:layout_height="60dp"
        android:text="SCIENCE"
        android:textStyle="bold"
        android:textAlignment="center"
        android:textColor="@android:color/holo_red_dark"
        android:background="@drawable/bmenu"/>

    <Button
        android:id="@+id/bGk"
        android:layout_width="226dp"
        android:layout_height="60dp"
        android:textStyle="bold"
        android:text="GENERAL KNOWLEDGE"
        android:textAlignment="center"
        android:textColor="@android:color/holo_red_dark"
        android:background="@drawable/bmenu"/>
```



```
</LinearLayout>

<LinearLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:orientation="vertical"
    android:layout_alignParentBottom="true"
    android:layout_toRightOf="@+id/linearLayout"
    android:textColor="@android:color/white"
    >

    <Button
        android:layout_width="60dp"
        android:layout_height="50dp"
        android:id="@+id/bExit"
        android:textStyle="bold"
        android:textSize="20dp"
        android:text="EXIT"
        android:background="@drawable/ext"
        android:textColor="#ff0c08" />
</LinearLayout>
</RelativeLayout>
```

```
// ComputerActivity
package com.example.lorita.
import android.app.Activity;
import android.content.Intent;
import android.os.Bundle;
import android.util.Log;
import android.view.View;
import android.widget.Button;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.TextView;

import java.util.List;

public class ComputerActivity extends Activity implements
View.OnClickListener {
    List<CompQuestion> quesList;
    int score=0;
    int qid=0;
    CompQuestion currentQ;
    TextView txtQuestion,ansTxt;
    RadioButton rda, rdb, rdc;
    Button butNext;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_computer);
        CompDbHelper db=new CompDbHelper(this);
```

```

quesList=db.getAllQuestions();
currentQ=quesList.get(qid);
txtQuestion=(TextView)findViewById(R.id.textView1);
ansTxt=(TextView)findViewById(R.id.textView2);
rda=(RadioButton)findViewById(R.id.radio0);
rdb=(RadioButton)findViewById(R.id.radio1);
rdc=(RadioButton)findViewById(R.id.radio2);

rda.setOnClickListener(this);
rdb.setOnClickListener(this);
rdc.setOnClickListener(this);

butNext=(Button)findViewById(R.id.button1);
setQuestionView();
butNext.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        RadioGroup
grp=(RadioGroup)findViewById(R.id.radioGroup1);
        RadioButton
answer=(RadioButton)findViewById(grp.getCheckedRadioButtonId());
        grp.clearCheck();
        Log.d("yourans", currentQ.getANSWER() + " " +
answer.getText());

        if(currentQ.getANSWER().equals(answer.getText()))
        {
            score++;
            Log.d("score", "Your score" + score);
        }

        if(qid<13){
            currentQ=quesList.get(qid);
            setQuestionView();
        }else{
            Intent intent = new
Intent(ComputerActivity.this, CompResultActivity.class);
            Bundle b = new Bundle();
            b.putInt("score", score);
            intent.putExtras(b);
            startActivity(intent);
            finish();
        }

        ansTxt.setText("");
    }
});
}
private void setQuestionView()
{

```

```

    txtQuestion.setText(currentQ.getQUESTION());
    rda.setText(currentQ.getOPTA());
    rdb.setText(currentQ.getOPTB());
    rdc.setText(currentQ.getOPTC());
    qid++;
}

@Override
public void onClick(View v) {
    ansTxt.setText("ANSWER : "+currentQ.getANSWER());
}
}

```

//Computer Question activity

//class Question

```

package com.example.lorita.quizgame;

public class CompQuestion {
    private int ID;
    private String QUESTION;
    private String OPTA;
    private String OPTB;
    private String OPTC;
    private String ANSWER;
    public CompQuestion()
    {
        ID=0;
        QUESTION="";
        OPTA="";
        OPTB="";
        OPTC="";
        ANSWER="";
    }
    public CompQuestion(String qUESTION, String oPTA, String
    oPTB, String oPTC,
                           String aNSWER) {

        QUESTION = qUESTION;
        OPTA = oPTA;
        OPTB = oPTB;
        OPTC = oPTC;
        ANSWER = aNSWER;
    }
    public int getID()
    {
        return ID;
    }
    public String getQUESTION() {
        return QUESTION;
    }
}

```

```
}

public String getOPTA() {
    return OPTA;
}

public String getOPTB() {
    return OPTB;
}

public String getOPTC() {
    return OPTC;
}

public String getANSWER() {
    return ANSWER;
}

public void setID(int id)
{
    ID=id;
}

public void setQUESTION(String qUESTION) {
    QUESTION = qUESTION;
}

public void setOPTA(String oPTA) {
    OPTA = oPTA;
}

public void setOPTB(String oPTB) {
    OPTB = oPTB;
}

public void setOPTC(String oPTC) {
    OPTC = oPTC;
}

public void setANSWER(String aNSWER) {
    ANSWER = aNSWER;
}

}

// Computer Question Store in Database

package com.example.lorita.quizgame;

import android.content.ContentValues;
import android.content.Context;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;

import java.util.ArrayList;
import java.util.List;

public class CompDbHelper extends SQLiteOpenHelper {
    private static final int DATABASE_VERSION = 1;
    // Database Name
    private static final String DATABASE_NAME = "quiz";
    // tasks table name
```

```

private static final String TABLE_QUEST = "quest";
// tasks Table Columns names
private static final String KEY_ID = "id";
private static final String KEY_QUES = "question";
private static final String KEY_ANSWER = "answer";
//correct option
private static final String KEY_OPTA= "opta"; //option a
private static final String KEY_OPTB= "optb"; //option b
private static final String KEY_OPTC= "optc"; //option c
private SQLiteDatabase dbase;
public CompDbHelper(Context context) {
    super(context, DATABASE_NAME, null, DATABASE_VERSION);
}
@Override
public void onCreate(SQLiteDatabase db) {
    dbase=db;
    String sql = "CREATE TABLE IF NOT EXISTS " + TABLE_QUEST
+ " ( "
        + KEY_ID + " INTEGER PRIMARY KEY AUTOINCREMENT, "
+ KEY_QUES
        + " TEXT, " + KEY_ANSWER+ " TEXT, "+KEY_OPTA +
TEXT, "
        +KEY_OPTB +" TEXT, "+KEY_OPTC+" TEXT)";
    db.execSQL(sql);
    addQuestions();
    //db.close();
}
private void addQuestions()
{
    CompQuestion q1=new CompQuestion("1 .Which company is
the largest manufacturer" +
        " of network equipment?", "HP", "IBM", "CISCO",
"CISCO");
    this.addQuestion(q1);
    CompQuestion q2=new CompQuestion("2. Which of the
following is NOT " +
        "an operating system?", "SuSe", "BIOS",
"DOS", "BIOS");
    this.addQuestion(q2);
    CompQuestion q3=new CompQuestion("3. Which of the
following is the fastest" +
        " writable memory?", "RAM",
"FLASH", "Register", "Register");
    this.addQuestion(q3);
    CompQuestion q4=new CompQuestion("4. Which of the
following" +
        " device regulates internet traffic?", "Router",
"Bridge", "Hub", "Router");
    this.addQuestion(q4);
    CompQuestion q5=new CompQuestion("5. Which of the
following is " +

```

```

        "NOT an interpreted
language?", "Ruby", "Python", "BASIC", "BASIC");
        this.addQuestion(q5);
        CompQuestion q6=new CompQuestion("6. Who invented" +
            " the microprocessor?", "Marcian E Huff", "George
Boole", "Joseph Jacquard", "Marcian E Huff");
        this.addQuestion(q6);
        CompQuestion q7=new CompQuestion("7. Which Intel chip
was the" +
            " first to support a " +
            "32-bit bus
architecture?", "286", "386DX", "Pentium", "386DX");
        this.addQuestion(q7);
        CompQuestion q8=new CompQuestion("8. Which was an early"
+
            " mainframe computer?", "UNIC", "ENIAC", "None of
these", "ENIAC");
        this.addQuestion(q8);
        CompQuestion q9=new CompQuestion("9. What is GPU?", 
            "Grouped Processing Unit", "Graphical Portable
Unit", "Ghaphical Performance Utility", "Ghaphical Performance
Utility");
        this.addQuestion(q9);
        CompQuestion q10=new CompQuestion("10. Which American
computer"+

            " company is called Big
Blue?", "IBM", "Microsoft", "Tandy Svenson", "IBM");
        this.addQuestion(q10);
        CompQuestion q11=new CompQuestion("11. Who invented
microprocesso?", "Joseph Jacquard", "Herman H
Goldstien", "Marcian E Huff", "Marcian E Huff");
        this.addQuestion(q11);

        CompQuestion q12=new CompQuestion("12. Where is the
headquarters"+ "of intel
located?", "Redmond,Washinton", "Tucson,Arizona", "Santa
Clara,Califonia", "Santa Clara,Califonia");
        this.addQuestion(q12);

        CompQuestion q13=new CompQuestion("13. The letter Dos
stand for?", "Data out System", "Disk out System", "Disk
operating System", "Disk operating System");
        this.addQuestion(q13);

    }

    @Override
    public void onUpgrade(SQLiteDatabase db, int oldV, int
newV) {
        // Drop older table if existed
        db.execSQL("DROP TABLE IF EXISTS " + TABLE_QUEST);
}

```

```

// Create tables again
onCreate(db);
}

// Adding new question
public void addQuestion(CompQuestion quest) {
    //SQLiteDatabase db = this.getWritableDatabase();
    ContentValues values = new ContentValues();
    values.put(KEY_QUEST, quest.getQUESTION());
    values.put(KEY_ANSWER, quest.getANSWER());
    values.put(KEY_OPTA, quest.getOPTA());
    values.put(KEY_OPTB, quest.getOPTB());
    values.put(KEY_OPTC, quest.getOPTC());
    // Inserting Row
    dbase.insert(TABLE_QUEST, null, values);
}

public List<CompQuestion> getAllQuestions() {
    List<CompQuestion> quesList = new
ArrayList<CompQuestion>();
    // Select All Query
    String selectQuery = "SELECT * FROM " + TABLE_QUEST;
    dbase=this.getReadableDatabase();
    Cursor cursor = dbase.rawQuery(selectQuery, null);
    // looping through all rows and adding to list
    if (cursor.moveToFirst()) {
        do {
            CompQuestion quest = new CompQuestion();
            quest.setID(cursor.getInt(0));
            quest.setQUESTION(cursor.getString(1));
            quest.setANSWER(cursor.getString(2));
            quest.setOPTA(cursor.getString(3));
            quest.setOPTB(cursor.getString(4));
            quest.setOPTC(cursor.getString(5));
            quesList.add(quest);
        } while (cursor.moveToNext());
    }
    // return quest list
    return quesList;
}

public int rowcount()
{
    int row=0;
    String selectQuery = "SELECT * FROM " + TABLE_QUEST;
    SQLiteDatabase db = this.getWritableDatabase();
    Cursor cursor = db.rawQuery(selectQuery, null);
    row=cursor.getCount();
    return row;
}

// result computer Activity
package com.example.lorita.quizgame;

```

```

import android.app.Activity;
import android.os.Bundle;
import android.widget.TextView;

public class CompResultActivity extends Activity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_comp_result);
        //get rating bar object

        //get text view
        TextView t=(TextView)findViewById(R.id.textResult);
        //get score
        Bundle b = getIntent().getExtras();
        int score= b.getInt("score");

        if (score == 0){
            t.setText("Score : "+score+"\n\nOops!
Better luck next time");
        }
        //display score
        switch (score)
        {
            case 1:
            case 2:
            case 3:
            case 4:
                t.setText("Score : "+score+" \n\nOops!
Better Luck Next Time!");
                break;
            case 5:
            case 6:
            case 7:
            case 8:
            case 9:
            case 10:
            case 11:

            case 12:

            case 13:

                t.setText("Score : "+score+ "\n\n
You win");
                break;
        }
    }
}

```

18

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```
//Graphical interface computer Activity

<RelativeLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/b1"
    tools:context=".QuizActivity" >
    <LinearLayout
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentBottom="true"
        android:layout_alignParentLeft="true"
        android:layout_alignParentRight="true"
        android:layout_alignParentTop="true"
        android:orientation="vertical" >
        <TextView
            android:id="@+id/textView1"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="      aaaaaaa"

        android:textAppearance="?android:attr/textAppearanceLarge" />
        <RadioGroup
            android:id="@+id/radioGroup1"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_weight="0.01"
            android:paddingTop="20sp">

            <RadioButton
                android:id="@+id/radio0"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:checked="false"
                android:textSize="15sp"
                android:textColor="@android:color/black"
                android:button="@drawable/radio_bg"
                android:paddingLeft="20dp"
                android:paddingTop="5sp"
                android:text="RadioButton" />

            <RadioButton
                android:id="@+id/radiol"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
```

```
        android:button="@drawable/radio_bg"
        android:textSize="15sp"
        android:textColor="@android:color/black"
        android:paddingLeft="20dp"
        android:paddingTop="5sp"
        android:text="RadioButton" />

<RadioButton
    android:id="@+id/radio2"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:textSize="15sp"
    android:textColor="@android:color/black"
    android:text="RadioButton"
    android:paddingLeft="20dp"
    android:paddingTop="5sp"
    android:button="@drawable/radio_bg"
    android:checked="false" />

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text=""
    android:textSize="15sp"
    android:textStyle="bold"
    android:paddingTop="10sp"

android:textColor="@android:color/holo_green_dark"
    android:id="@+id/textView2"
    android:layout_gravity="center_horizontal" />

</RadioGroup>
<Button
    android:id="@+id/button1"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:background="@drawable/quizbutton"
    android:text="@string/str_next" />

</LinearLayout>
</RelativeLayout>
// Computer result interface
<RelativeLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/b2"
    tools:context=".ResultActivity" >

<LinearLayout
    android:layout_width="wrap_content"
```

1 .Which of the following is NOT
an astronomical object?

- Pulsar
- Brittle Star
- Black hole

ANSWER : Brittle Star

Score : /

You win

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```
    android:layout_height="wrap_content"
    android:layout_alignParentBottom="true"
    android:layout_alignParentLeft="true"
    android:layout_alignParentRight="true"
    android:layout_alignParentTop="true"
    android:orientation="vertical" >

    <TextView
        android:id="@+id/textResult"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_weight="0.08"
        android:paddingTop="30sp"
        android:textStyle="bold"
        android:textSize="20sp"
        android:text="" 

    android:textAppearance="?android:attr/textAppearanceLarge" />
</LinearLayout>

</RelativeLayout>

// Maths activity

package com.example.lorita.quizgame;

import android.annotation.SuppressLint;
import android.annotation.TargetApi;
import android.app.Activity;
import android.content.Intent;
import android.os.Build;
import android.os.Bundle;
import android.os.CountDownTimer;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;

import java.util.List;
import java.util.concurrent.TimeUnit;

public class MathActivity extends Activity {
    List<MathQuestion> quesList;
    int score = 0;
    int qid = 0;
```

```
MathQuestion currentQ;
TextView txtQuestion, times, scored;
Button button1, button2, button3;

@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_math);

    MathQuizHelper db = new MathQuizHelper(this); // my
question bank class
    quesList = db.getAllQuestions(); // this will fetch
all quetionall questions
    currentQ = quesList.get(qid); // the current question

    txtQuestion = (TextView)
findViewById(R.id.txtQuestion);
    // the textview in which the question will be
displayed

    // the three buttons,
    // the idea is to set the text of three buttons with
the options from question bank
    button1 = (Button) findViewById(R.id.button1);
    button2 = (Button) findViewById(R.id.button2);
    button3 = (Button) findViewById(R.id.button3);

    // the textview in which score will be displayed
    scored = (TextView) findViewById(R.id.score);

    // the timer
    times = (TextView) findViewById(R.id.timers);

    // method which will set the things up for our game
    setQuestionView();
    times.setText("00:02:00");

    // A timer of 60 seconds to play for, with an interval
of 1 second (1000 milliseconds)
    CounterClass timer = new CounterClass(60000, 1000);
    timer.start();

    // button click listeners
    button1.setOnClickListener(new View.OnClickListener()
{
    @Override
    public void onClick(View v) {
```



```
// passing the button text to other method  
  
// to check whether the answer is correct or  
not  
// same for all three buttons  
getAnswer(button1.getText().toString());  
}  
});  
  
button2.setOnClickListener(new View.OnClickListener()  
{  
    @Override  
    public void onClick(View v) {  
        getAnswer(button2.getText().toString());  
    }  
});  
  
button3.setOnClickListener(new View.OnClickListener()  
{  
    @Override  
    public void onClick(View v) {  
        getAnswer(button3.getText().toString());  
    }  
});  
  
public void getAnswer(String AnswerString) {  
    if (currentQ.getANSWER().equals(AnswerString)) {  
  
        // if conditions matches increase the int (score)  
by 1  
        // and set the text of the score view  
        score++;  
        scored.setText("Score : " + score);  
    } else {  
  
        // if unlucky start activity and finish the game  
  
        Intent intent = new Intent(MathActivity.this,  
            MathResultActivity.class);  
  
        // passing the int value  
        Bundle b = new Bundle();  
        b.putInt("score", score); // Your score  
        intent.putExtras(b); // Put your score to your  
  
next  
        startActivity(intent);  
        finish();  
    }  
if (qid < 20) {
```

```

// if questions are not over then do this
currentQ = quesList.get(qid);
setQuestionView();
} else {

    // if over do this
    Intent intent = new Intent(MathActivity.this,
        MathResultActivity.class);
    Bundle b = new Bundle();
    b.putInt("score", score); // Your score
    intent.putExtras(b); // Put your score to your
next
startActivity(intent);
finish();
}

}

@TargetApi(Build.VERSION_CODES.GINGERBREAD)
@SuppressLint("NewApi")
public class CounterClass extends CountDownTimer {

    public CounterClass(long millisInFuture, long
countDownInterval) {
        super(millisInFuture, countDownInterval);
        // TODO Auto-generated constructor stub
    }

    @Override
    public void onFinish() {
        times.setText("Time is up");
    }

    @Override
    public void onTick(long millisUntilFinished) {
        // TODO Auto-generated method stub

        long millis = millisUntilFinished;
        String hms = String.format(
            "%02d:%02d:%02d",
            TimeUnit.MILLISECONDS.toHours(millis),
            TimeUnit.MILLISECONDS.toMinutes(millis)

TimeUnit.HOURS.toMinutes(TimeUnit.MILLISECONDS
                .toHours(millis)),
            TimeUnit.MILLISECONDS.toSeconds(millis)
        )
    }
}

```

```
TimeUnit.MILLISECONDS.toSeconds(TimeUnit.MILLISECONDS
                                .toMinutes(millis)));
        System.out.println(hms);
        times.setText(hms);
    }
}

private void setQuestionView() {

    // the method which will put all things together
    txtQuestion.setText(currentQ.getQUESTION());
    button1.setText(currentQ.getOPTA());
    button2.setText(currentQ.getOPTB());
    button3.setText(currentQ.getOPTC());

    qid++;
}
}

// Math Question Activity
package com.example.lorita.quizgame;

import android.app.Activity;

public class MathQuestion extends Activity {

    private int ID;
    private String QUESTION;
    private String OPTA;
    private String OPTB;
    private String OPTC;

    private String ANSWER;

    public MathQuestion() {
        ID = 0;
        QUESTION = "";
        OPTA = "";
        OPTB = "";
        OPTC = "";

        ANSWER = "";
    }

    public MathQuestion(String qUESTION, String oPTA, String
oPTB, String oPTC,
                        String aNSWER) {
        QUESTION = qUESTION;
```

```
OPTA = oPTA;
OPTB = oPTB;
OPTC = oPTC;

ANSWER = aNSWER;

}

public int getID() {
    return ID;
}

public String getQUESTION() {
    return QUESTION;
}

public String getOPTA() {
    return OPTA;
}

public String getOPTB() {
    return OPTB;
}

public String getOPTC() {
    return OPTC;
}

public String getANSWER() {
    return ANSWER;
}

public void setID(int id) {
    ID = id;
}

public void setQUESTION(String qUESTION) {
    QUESTION = qUESTION;
}

public void setOPTA(String oPTA) {
    OPTA = oPTA;
}

public void setOPTB(String oPTB) {
    OPTB = oPTB;
}

public void setOPTC(String oPTC) {
    OPTC = oPTC;
}
```

```
public void setANSWER(String ANSWER) {  
    ANSWER = ANSWER;  
}  
}
```

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// Maths question Store in Database

```
package com.example.lorita.quizgame;  
  
import android.content.ContentValues;  
import android.content.Context;  
import android.database.Cursor;  
import android.database.sqlite.SQLiteDatabase;  
import android.database.sqlite.SQLiteOpenHelper;  
  
import java.util.ArrayList;  
import java.util.List;  
  
public class MathQuizHelper extends SQLiteOpenHelper {  
    private static final int DATABASE_VERSION = 1;  
    // Database Name  
    private static final String DATABASE_NAME = "mathsone";  
    // tasks table name  
    private static final String TABLE_QUEST = "quest";  
    // tasks Table Columns names  
    private static final String KEY_ID = "qid";  
    private static final String KEY_QUEST = "question";  
    private static final String KEY_ANSWER = "answer"; //  
correct option  
    private static final String KEY_OPTA = "opta"; // option a  
    private static final String KEY_OPTB = "optb"; // option b  
    private static final String KEY_OPTC = "optc"; // option c  
  
    private SQLiteDatabase dbase;  
  
    public MathQuizHelper(Context context) {  
        super(context, DATABASE_NAME, null, DATABASE_VERSION);  
    }  
  
    @Override  
    public void onCreate(SQLiteDatabase db) {  
        dbase = db;  
        String sql = "CREATE TABLE IF NOT EXISTS " + TABLE_QUEST  
+ " (" + KEY_ID + " INTEGER PRIMARY KEY AUTOINCREMENT, "  
+ KEY_QUEST + " TEXT, " + KEY_ANSWER + " TEXT, " + KEY_OPTA +
```

```

" TEXT, "
        + KEY_OPTB + " TEXT, " + KEY_OPTC + " TEXT)";           28
    db.execSQL(sql);
    addQuestion();
    // db.close();
}

private void addQuestion() {
    MathQuestion q1 = new MathQuestion("5+2 = ?", "7", "8",
"6", "7");
    this.addQuestion(q1);
    MathQuestion q2 = new MathQuestion("2+18 = ?", "18",
"19", "20", "20");
    this.addQuestion(q2);
    MathQuestion q3 = new MathQuestion("10-3 = ?", "6", "7",
"8", "7");
    this.addQuestion(q3);
    MathQuestion q4 = new MathQuestion("5+7 = ?", "12",
"13", "14", "12");
    this.addQuestion(q4);
    MathQuestion q5 = new MathQuestion("3-1 = ?", "1", "3",
"2", "2");
    this.addQuestion(q5);
    MathQuestion q6 = new MathQuestion("0+1 = ?", "1", "0",
"10", "1");
    this.addQuestion(q6);
    MathQuestion q7 = new MathQuestion("9-9 = ?", "0", "9",
"1", "0");
    this.addQuestion(q7);
    MathQuestion q8 = new MathQuestion("3+6 = ?", "8", "7",
"9", "9");
    this.addQuestion(q8);
    MathQuestion q9 = new MathQuestion("1+5 = ?", "6", "7",
"5", "6");
    this.addQuestion(q9);
    MathQuestion q10 = new MathQuestion("7-5 = ?", "3", "2",
"6", "2");
    this.addQuestion(q10);
    MathQuestion q11 = new MathQuestion("7-2 = ?", "7", "6",
"5", "5");
    this.addQuestion(q11);
    MathQuestion q12 = new MathQuestion("3+5 = ?", "8", "7",
"5", "8");
    this.addQuestion(q12);
    MathQuestion q13 = new MathQuestion("0+6 = ?", "7", "6",
"5", "6");
    this.addQuestion(q13);
    MathQuestion q14 = new MathQuestion("12-10 = ?", "1",
"2", "3", "2");
    this.addQuestion(q14);
    MathQuestion q15 = new MathQuestion("12+2 = ?", "14",
"14", "14");
}

```

```

    "15", "16", "14");
    this.addQuestion(q15);
    MathQuestion q16 = new MathQuestion("2-1 = ?", "2", "1",
"0", "1");
    this.addQuestion(q16);
    MathQuestion q17 = new MathQuestion("6-6 = ?", "6",
"12", "0", "0");
    this.addQuestion(q17);
    MathQuestion q18 = new MathQuestion("5-1 = ?", "4",
"2", "4");
    this.addQuestion(q18);
    MathQuestion q19 = new MathQuestion("4+2 = ?", "6",
"5", "6");
    this.addQuestion(q19);
    MathQuestion q20 = new MathQuestion("5+1 = ?", "6",
"5", "6");
    this.addQuestion(q20);
    MathQuestion q21 = new MathQuestion("5-4 = ?", "5",
"1", "1");
    this.addQuestion(q21);

    // END
}

@Override
public void onUpgrade(SQLiteDatabase db, int oldV, int
newV) {
    // Drop older table if existed
    db.execSQL("DROP TABLE IF EXISTS " + TABLE_QUEST);
    // Create tables again
    onCreate(db);
}

// Adding new question
public void addQuestion(MathQuestion quest) {
    // SQLiteDatabase db = this.getWritableDatabase();
    ContentValues values = new ContentValues();
    values.put(KEY_QUEST, quest.getQUESTION());
    values.put(KEY_ANSWER, quest.getANSWER());
    values.put(KEY_OPTA, quest.getOPTA());
    values.put(KEY_OPTB, quest.getOPTB());
    values.put(KEY_OPTC, quest.getOPTC());

    // Inserting Row
    dbase.insert(TABLE_QUEST, null, values);
}

public List<MathQuestion> getAllQuestions() {
    List<MathQuestion> quesList = new
ArrayList<MathQuestion>();
    // Select All Query

```

```
String selectQuery = "SELECT * FROM " + TABLE_QUEST;
dbase = this.getReadableDatabase();
Cursor cursor = dbase.rawQuery(selectQuery, null);
// looping through all rows and adding to list
if (cursor.moveToFirst()) {
    do {
        MathQuestion quest = new MathQuestion();
        quest.setID(cursor.getInt(0));
        quest.setQUESTION(cursor.getString(1));
        quest.setANSWER(cursor.getString(2));
        quest.setOPTA(cursor.getString(3));
        quest.setOPTB(cursor.getString(4));
        quest.setOPTC(cursor.getString(5));

        quesList.add(quest);
    } while (cursor.moveToNext());
}
// return quest list
return quesList;
}
```

}

// MathResultActivity

```
package com.example.lorita.quizgame;

import android.app.Activity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.TextView;

public class MathResultActivity extends Activity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_math_result);

        TextView textResult = (TextView)
findViewById(R.id.textResult);
        Bundle b = getIntent().getExtras();
        int score = b.getInt("score");
    }
}
```

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```
textResult.setText("Your score is " + " " + score + ".  
Thanks for playing my game.");  
}  
  
public void playagain(View o) {  
  
    Intent intent = new Intent(this, MathActivity.class);  
    startActivity(intent);  
  
}
```

//Graphical Maths Questions

```
<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout  
    xmlns:android="http://schemas.android.com/apk/res/android"  
    xmlns:ads="http://schemas.android.com/apk/res-auto"  
    android:id="@+id/relatively"  
    android:layout_width="match_parent"  
    android:layout_height="match_parent"  
    android:background="#d15400"  
    android:orientation="vertical"  
    android:weightSum="1" >  
  
<LinearLayout  
    android:id="@+id/linearLayout1"  
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:layout_weight="0.90"  
    android:orientation="vertical"  
    android:weightSum="1" >  
  
<LinearLayout  
    android:id="@+id/linearLayout11"  
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:layout_weight="0.20"  
    android:orientation="vertical"  
    android:weightSum="1" >  
  
<LinearLayout  
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:layout_weight="1"  
    android:orientation="horizontal" >
```

```
<TextView
    android:id="@+id/score"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_centerHorizontal="true"
    android:layout_gravity="center"
    android:layout_marginRight="10dp"
    android:layout_weight="1"
    android:gravity="center"
    android:text="Score : 1"
    android:textColor="#ffffff"
    android:textSize="25.0sp"
    android:textStyle="bold" />

<TextView
    android:id="@+id/timers"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_centerHorizontal="true"
    android:layout_gravity="center"
    android:layout_marginRight="10dp"
    android:layout_weight="1"
    android:gravity="center"
    android:text="00:00:49"
    android:textColor="#ffffff"
    android:textSize="25.0sp"
    android:textStyle="bold" />
</LinearLayout>
</LinearLayout>

<LinearLayout
    android:id="@+id/linearLayout12"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_weight="0.60"
    android:orientation="vertical"
    android:weightSum="1" >

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_weight="0.40" >

<TextView
    android:id="@+id/txtQuestion"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_centerHorizontal="true"
    android:layout_gravity="center"
    android:layout_marginTop="5dp"
```

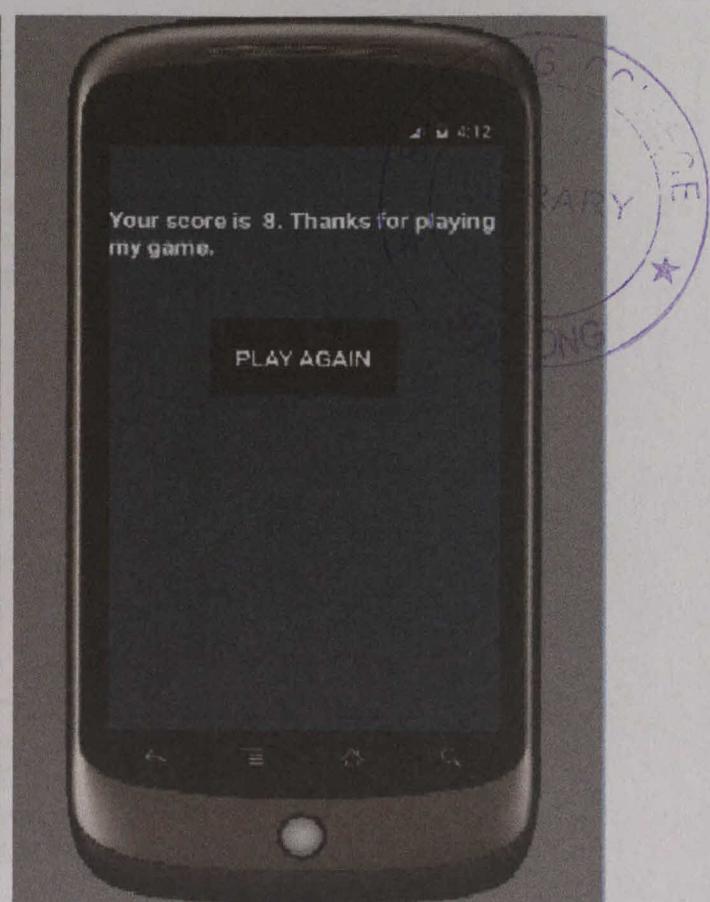
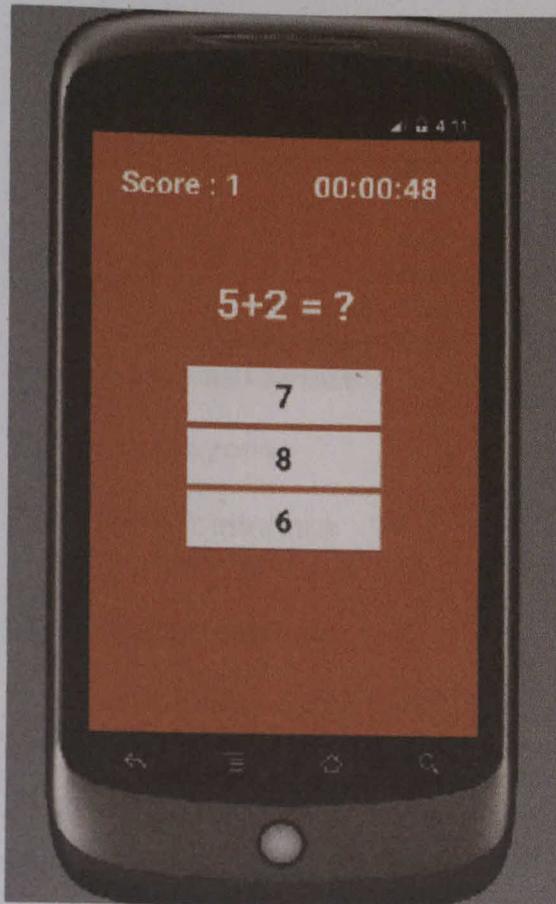
```
        android:gravity="center"
        android:text="15*2*1-1"
        android:textColor="#ffffff"
        android:textSize="35.0sp"
        android:textStyle="bold" />
    </LinearLayout>

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_weight="0.20"
        android:orientation="vertical"
        android:weightSum="1" >

        <Button
            android:id="@+id/button1"
            android:layout_width="fill_parent"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:layout_marginLeft="80dp"
            android:layout_marginRight="80dp"
            android:layout_marginTop="5dp"
            android:background="#fff"
            android:gravity="center"
            android:text="30"
            android:textColor="#000000"
            android:textSize="25.0sp" />

        <Button
            android:id="@+id/button2"
            android:layout_width="fill_parent"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:layout_marginLeft="80dp"
            android:layout_marginRight="80dp"
            android:layout_marginTop="5dp"
            android:background="#fff"
            android:gravity="center"
            android:text="29"
            android:textColor="#000000"
            android:textSize="25.0sp" />

        <Button
            android:id="@+id/button3"
            android:layout_width="fill_parent"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:layout_marginLeft="80dp"
            android:layout_marginRight="80dp"
            android:layout_marginTop="5dp"
            android:background="#fff"
```



```
        android:gravity="center"
        android:text="32"
        android:textColor="#000000"
        android:textSize="25.0sp" />
    </LinearLayout>
</LinearLayout>
</LinearLayout>

</LinearLayout>

// Math result interface
<?xml version="1.0" encoding="utf-8"?>

    <LinearLayout
        xmlns:android="http://schemas.android.com/apk/res/android"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:background="#2a3f4c"
        android:orientation="vertical"
        android:layout_centerInParent="true"
        >

        <TextView
            android:id="@+id/textResult"
            android:layout_width="match_parent"
            android:layout_gravity="center"
            android:layout_marginTop="50dp"
            android:layout_height="wrap_content"
            android:text="Large Text"
            android:textColor="#ffffff"
            android:textSize="20sp"
            android:textStyle="bold" />

        <Button
            android:id="@+id/btn"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:background="#000000"
            android:layout_marginTop="50dp"
            android:padding="20dp"
            android:layout_gravity="center"
            android:onClick="playagain"
            android:text="PLAY AGAIN"
            android:textColor="#ffffff"
            android:textSize="20sp"/>
    </LinearLayout>

//Science Activity
package com.example.lorita.quizgame;

import android.app.Activity;
```

```
import android.content.Intent;
import android.os.Bundle;
import android.util.Log;
import android.view.View;
import android.widget.Button;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.TextView;

import java.util.List;

public class ScienceActivity extends Activity implements
View.OnClickListener {
    List<ScienceQuestion> quesList;
    int score=0;
    int qid=0;
    ScienceQuestion currentQ;
    TextView txtQuestion,ansTxt;
    RadioButton rda, rdb, rdc;
    Button butNext;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_science);
        ScienceDbHelper db=new ScienceDbHelper(this);
        quesList=db.getAllQuestions();
        currentQ=quesList.get(qid);
        txtQuestion=(TextView)findViewById(R.id.textView1);
        ansTxt=(TextView)findViewById(R.id.textView2);
        rda=(RadioButton)findViewById(R.id.radio0);
        rdb=(RadioButton)findViewById(R.id.radio1);
        rdc=(RadioButton)findViewById(R.id.radio2);

        rda.setOnClickListener(this);
        rdb.setOnClickListener(this);
        rdc.setOnClickListener(this);

        butNext=(Button)findViewById(R.id.button1);
        setQuestionView();
        butNext.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                RadioGroup
grp=(RadioGroup)findViewById(R.id.radioGroup1);
                RadioButton
answer=(RadioButton)findViewById(grp.getCheckedRadioButtonId());
            );
                grp.clearCheck();
                Log.d("yourans", currentQ.getANSWER() + " " +
answer.getText());
        }
    }
}
```

```
if(currentQ.getANSWER().equals(answer.getText()))
```

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```
{ score++;
```

```
Log.d("score", "Your score" + score);
```

```
}
```

```
if(qid<10){
```

```
currentQ=quesList.get(qid);
```

```
setQuestionView();
```

```
}else{
```

```
Intent intent = new
```

```
Intent(ScienceActivity.this, ScienceResultActivity.class);
```

```
Bundle b = new Bundle();
```

```
b.putInt("score", score);
```

```
intent.putExtras(b);
```

```
startActivity(intent);
```

```
finish();
```

```
}
```

```
ansTxt.setText("");
```

```
}
```

```
});
```

```
}
```

```
private void setQuestionView()
```

```
{
```

```
txtQuestion.setText(currentQ.getQUESTION());
```

```
rda.setText(currentQ.getOPTA());
```

```
rdb.setText(currentQ.getOPTB());
```

```
rdc.setText(currentQ.getOPTC());
```

```
qid++;
```

```
}
```

```
@Override
```

```
public void onClick(View v) {
```

```
ansTxt.setText("ANSWER : "+currentQ.getANSWER());
```

```
}
```

```
}
```

//Science Question Activity

```
package com.example.lorita.quizgame;
```

```
public class ScienceQuestion {
```

```
private int ID;
```

```
private String QUESTION;
```

```
private String OPTA;
```

```
private String OPTB;
```

```
private String OPTC;
```

```
private String ANSWER;
```

```
public ScienceQuestion()
```

```
{
```

```
ID=0;
QUESTION="";
OPTA="";
OPTB="";
OPTC="";
ANSWER="";

}

public ScienceQuestion(String qUESTION, String oPTA, String
oPTB, String oPTC,
                      String aNSWER) {

    QUESTION = qUESTION;
    OPTA = oPTA;
    OPTB = oPTB;
    OPTC = oPTC;
    ANSWER = aNSWER;
}

public int getID()
{
    return ID;
}

public String getQUESTION() {
    return QUESTION;
}

public String getOPTA() {
    return OPTA;
}

public String getOPTB() {
    return OPTB;
}

public String getOPTC() {
    return OPTC;
}

public String getANSWER() {
    return ANSWER;
}

public void setID(int id)
{
    ID=id;
}

public void setQUESTION(String qUESTION) {
    QUESTION = qUESTION;
}

public void setOPTA(String oPTA) {
    OPTA = oPTA;
}

public void setOPTB(String oPTB) {
    OPTB = oPTB;
}

public void setOPTC(String oPTC) {
    OPTC = oPTC;
```

```
}

public void setANSWER(String ANSWER) {
    ANSWER = ANSWER;
}

}

// Science Question Store in Database
package com.example.lorita.quizgame;

import android.content.ContentValues;
import android.content.Context;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;

import java.util.ArrayList;
import java.util.List;

public class ScienceDbHelper extends SQLiteOpenHelper {
    private static final int DATABASE_VERSION = 1;
    // Database Name
    private static final String DATABASE_NAME = "scquiz";
    // tasks table name
    private static final String TABLE_QUEST = "scquest";
    // tasks Table Columns names
    private static final String KEY_ID = "sc_id";
    private static final String KEY_QUES = "sc_question";
    private static final String KEY_ANSWER = "sc_answer";
    //correct option
    private static final String KEY_OPTA= "sc_opta"; //option a
    private static final String KEY_OPTB= "sc_optb"; //option b
    private static final String KEY_OPTC= "sc_optc"; //option c
    private SQLiteDatabase dbase;
    public ScienceDbHelper(Context context) {
        super(context, DATABASE_NAME, null, DATABASE_VERSION);
    }
    @Override
    public void onCreate(SQLiteDatabase db) {
        dbase=db;
        String sql = "CREATE TABLE IF NOT EXISTS " + TABLE_QUEST
        + " (" + KEY_ID + " INTEGER PRIMARY KEY AUTOINCREMENT, "
        + KEY_QUES + " TEXT, " + KEY_ANSWER+ " TEXT, "+KEY_OPTA +
        TEXT, "
        +KEY_OPTB +" TEXT, "+KEY_OPTC+" TEXT)";
        db.execSQL(sql);
        addQuestions();
        //db.close();
    }
    private void addQuestions()
    {
```

ScienceQuestion q1=new ScienceQuestion("1 . Which of the following is NOT" +
 " an astronomical object?", "Pulsar", "Brittle Star", "Black hole", "Brittle Star");
 this.addQuestion(q1);
 ScienceQuestion q2=new ScienceQuestion("2. Which of the following is " +
 "the best conductor?", "Filtered Hot Water",
 "Filtered water at normal temperature", "Distilled Water",
 "Distilled Water");
 this.addQuestion(q2);
 ScienceQuestion q3=new ScienceQuestion("3. When a body is taken from the" +
 " earth to the moon?", "Its weight increases", "Its weight decreases", "It becomes completely weightless", "Its weight decreases");
 this.addQuestion(q3);
 ScienceQuestion q4=new ScienceQuestion("4. The substance that contain maximum" +
 " amount of nitrogen is?", "Urea", "Ammonium Sulphate", "Ammonium Nitrate", "Urea");
 this.addQuestion(q4);
 ScienceQuestion q5=new ScienceQuestion("5. The items amenable to detection by " +
 "soft X-ray are", "Contrabands", "Narcotics", "Genuine coins from counterfeit coins", "Genuine coins from counterfeit coins");
 this.addQuestion(q5);
 ScienceQuestion q6=new ScienceQuestion("6. While cooking food, the compounds lost" +
 " to the maximum extent are?", "Fats", "Carbohydrates", "Vitamins", "Vitamins");
 this.addQuestion(q6);
 ScienceQuestion q7=new ScienceQuestion("7. Water available" +
 " to the plant is? ", "Surface Water", "Hygroscopic Water", "Capillary Water", "Capillary Water");
 this.addQuestion(q7);
 ScienceQuestion q8=new ScienceQuestion("8. Cell membrane " +
 " is?", "Permeable", "Impermeable", "Selectively Permeable", "Selectively Permeable");
 this.addQuestion(q8);
 ScienceQuestion q9=new ScienceQuestion("9. Conversion of starch to organic " +
 "acid is essential for stomatal?", "Closure", "Opening", "Initiation", "Opening");
 this.addQuestion(q9);
 ScienceQuestion q10=new ScienceQuestion("10. Inert gases are",
 "Miscible with water", "Not stable", "Chemically

```

very inactive", "Chemically very inactive");
    this.addQuestion(q10);
}
@Override
public void onUpgrade(SQLiteDatabase db, int oldV, int
newV) {
    // Drop older table if existed
    db.execSQL("DROP TABLE IF EXISTS " + TABLE_QUEST);
    // Create tables again
    onCreate(db);
}
// Adding new question
public void addQuestion(ScienceQuestion quest) {
    //SQLiteDatabase db = this.getWritableDatabase();
    ContentValues values = new ContentValues();
    values.put(KEY_QUEST, quest.getQUESTION());
    values.put(KEY_ANSWER, quest.getANSWER());
    values.put(KEY_OPTA, quest.getOPTA());
    values.put(KEY_OPTB, quest.getOPTB());
    values.put(KEY_OPTC, quest.getOPTC());
    // Inserting Row
    dbase.insert(TABLE_QUEST, null, values);
}
public List<ScienceQuestion> getAllQuestions() {
    List<ScienceQuestion> quesList = new
ArrayList<ScienceQuestion>();
    // Select All Query
    String selectQuery = "SELECT * FROM " + TABLE_QUEST;
    dbase=this.getReadableDatabase();
    Cursor cursor = dbase.rawQuery(selectQuery, null);
    // looping through all rows and adding to list
    if (cursor.moveToFirst()) {
        do {
            ScienceQuestion quest = new ScienceQuestion();
            quest.setID(cursor.getInt(0));
            quest.setQUESTION(cursor.getString(1));
            quest.setANSWER(cursor.getString(2));
            quest.setOPTA(cursor.getString(3));
            quest.setOPTB(cursor.getString(4));
            quest.setOPTC(cursor.getString(5));
            quesList.add(quest);
        } while (cursor.moveToNext());
    }
    // return quest list
    return quesList;
}
public int rowCount()
{
    int row=0;
    String selectQuery = "SELECT * FROM " + TABLE_QUEST;
    SQLiteDatabase db = this.getWritableDatabase();
}

```

```
Cursor cursor = db.rawQuery(selectQuery, null);
row=cursor.getCount();
return row;
}

}

//Graphical interface of Science question and answer

<RelativeLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/b4"
    tools:context=".QuizActivity" >
<LinearLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentBottom="true"
    android:layout_alignParentLeft="true"
    android:layout_alignParentRight="true"
    android:layout_alignParentTop="true"
    android:orientation="vertical" >
<TextView
    android:id="@+id/textView1"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="      aaaaaaa"

    android:textAppearance="?android:attr/textAppearanceLarge" />
<RadioGroup
    android:id="@+id/radioGroup1"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_weight="0.01"
    android:paddingTop="20sp">

    <RadioButton
        android:id="@+id/radio0"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:checked="false"
        android:textSize="15sp"
        android:textColor="@android:color/black"
        android:button="@drawable/radio_bg"
        android:paddingLeft="20dp"
        android:paddingTop="5sp"
        android:text="RadioButton" />

    <RadioButton
        android:id="@+id/radio1"
        android:layout_width="match_parent"
```

```
        android:layout_height="wrap_content"
        android:button="@drawable/radio_bg"
        android:textSize="15sp"
        android:textColor="@android:color/black"
        android:paddingLeft="20dp"
        android:paddingTop="5sp"
        android:text="RadioButton" />

    <RadioButton
        android:id="@+id/radio2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:textSize="15sp"
        android:textColor="@android:color/black"
        android:text="RadioButton"
        android:paddingLeft="20dp"
        android:paddingTop="5sp"
        android:button="@drawable/radio_bg"
        android:checked="false" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text=""
        android:textSize="15sp"
        android:textStyle="bold"
        android:paddingTop="10sp"
        android:id="@+id/textView2"
        android:layout_gravity="center_horizontal"
        android:textColor="#e87425" />

</RadioGroup>
<Button
    android:id="@+id/button1"
    android:layout_width="match_parent"
    android:layout_height="50dp"
    android:background="@drawable/scb"
    android:text="@string/str_next" />
</LinearLayout>
</RelativeLayout>
// interface of Science result
<RelativeLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/b3"
    tools:context=".ResultActivity" >

    <LinearLayout
        android:layout_width="wrap_content"
```

3. Human Rights Day is observed on?

A: 10th December

B: 10th March

C: 10th July

ANSWER : 10th December

Score : 7

You win

```
    android:layout_height="wrap_content"
    android:layout_alignParentBottom="true"
    android:layout_alignParentLeft="true"
    android:layout_alignParentRight="true"
    android:layout_alignParentTop="true"
    android:orientation="vertical" >

    <TextView
        android:id="@+id/textResult"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_weight="0.08"
        android:paddingTop="30sp"
        android:textStyle="bold"
        android:textSize="20sp"
        android:text=""

    android:textAppearance="?android:attr/textAppearanceLarge" />
</LinearLayout>

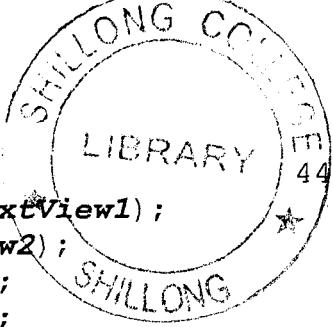
</RelativeLayout>

// GK Activity
package com.example.lorita.quizgame;

import android.app.Activity;
import android.content.Intent;
import android.os.Bundle;
import android.util.Log;
import android.view.View;
import android.widget.Button;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.TextView;

import java.util.List;

public class GkActivity extends Activity implements
View.OnClickListener {
    List<GkQuestion> quesList;
    int score=0;
    int qid=0;
    GkQuestion currentQ;
    TextView txtQuestion,ansTxt;
    RadioButton rda, rdb, rdc;
    Button butNext;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_gk);
        GkDbHelper db=new GkDbHelper(this);
```



```
quesList=db.getAllQuestions();
currentQ=quesList.get(qid);
txtQuestion=(TextView)findViewById(R.id.textView1);
ansTxt=(TextView)findViewById(R.id.textView2);
rda=(RadioButton)findViewById(R.id.radio0);
rdb=(RadioButton)findViewById(R.id.radio1);
rdc=(RadioButton)findViewById(R.id.radio2);

rda.setOnClickListener(this);
rdb.setOnClickListener(this);
rdc.setOnClickListener(this);

butNext=(Button)findViewById(R.id.button1);
setQuestionView();
butNext.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        RadioGroup
grp=(RadioGroup)findViewById(R.id.radioGroup1);
        RadioButton
answer=(RadioButton)findViewById(grp.getCheckedRadioButtonId());
    grp.clearCheck();
    Log.d("yourans", currentQ.getANSWER() + " " +
answer.getText());

    if(currentQ.getANSWER().equals(answer.getText()))
    {
        score++;
        Log.d("score", "Your score" + score);
    }

    if(qid<10){
        currentQ=quesList.get(qid);
        setQuestionView();
    }else{
        Intent intent = new Intent(GkActivity.this,
GkResultActivity.class);
        Bundle b = new Bundle();
        b.putInt("score", score);
        intent.putExtras(b);
        startActivity(intent);
        finish();
    }

    ansTxt.setText("");
}
});
}

private void setQuestionView()
{
```

```

txtQuestion.setText(currentQ.getQUESTION());
rda.setText(currentQ.getOPTA());
rdb.setText(currentQ.getOPTB());
rdc.setText(currentQ.getOPTC());
qid++;
}

@Override
public void onClick(View v) {
    ansTxt.setText("ANSWER : "+currentQ.getANSWER());
}
}

// GK Question Activity

package com.example.lorita.quizgame;

public class GkQuestion {
private int ID;
private String QUESTION;
private String OPTA;
private String OPTB;
private String OPTC;
private String ANSWER;
public GkQuestion()
{
    ID=0;
    QUESTION="";
    OPTA="";
    OPTB="";
    OPTC="";
    ANSWER="";
}
public GkQuestion(String qUESTION, String oPTA, String
oPTB, String oPTC,
                String aNSWER) {

    QUESTION = qUESTION;
    OPTA = oPTA;
    OPTB = oPTB;
    OPTC = oPTC;
    ANSWER = aNSWER;
}
public int getID()
{
    return ID;
}
public String getQUESTION() {
    return QUESTION;
}
public String getOPTA() {

```

```
    return OPTA;
}
public String getOPTB() {
    return OPTB;
}
public String getOPTC() {
    return OPTC;
}
public String getANSWER() {
    return ANSWER;
}
public void setID(int id)
{
    ID=id;
}
public void setQUESTION(String qUESTION) {
    QUESTION = qUESTION;
}
public void setOPTA(String oPTA) {
    OPTA = oPTA;
}
public void setOPTB(String oPTB) {
    OPTB = oPTB;
}
public void setOPTC(String oPTC) {
    OPTC = oPTC;
}
public void setANSWER(String aNSWER) {
    ANSWER = aNSWER;
}
}
// GK store in Database
package com.example.lorita.quizgame;

import android.content.ContentValues;
import android.content.Context;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;

import java.util.ArrayList;
import java.util.List;

public class GkDbHelper extends SQLiteOpenHelper {
    private static final int DATABASE_VERSION = 1;
    // Database Name
    private static final String DATABASE_NAME = "gkquiz";
    // tasks table name
    private static final String TABLE_QUEST = "gk_quest";
    // tasks Table Columns names
    private static final String KEY_ID = "gk_id";
```

```

private static final String KEY_QUEST = "gk_question";
private static final String KEY_ANSWER = "gk_answer";
    //correct option
private static final String KEY_OPTA= "gkopta"; //option a
private static final String KEY_OPTB= "gkoptb"; //option b
private static final String KEY_OPTC= "gkoptc"; //option c
private SQLiteDatabase dbase;
public GkDbHelper(Context context) {
    super(context, DATABASE_NAME, null, DATABASE_VERSION);
}
@Override
public void onCreate(SQLiteDatabase db) {
    dbase=db;
    String sql = "CREATE TABLE IF NOT EXISTS " + TABLE_QUEST
+ " ( "
        + KEY_ID + " INTEGER PRIMARY KEY AUTOINCREMENT, "
+ KEY_QUEST
        + " TEXT, " + KEY_ANSWER+ " TEXT, "+KEY_OPTA +
TEXT, "
        +KEY_OPTB +" TEXT, "+KEY_OPTC+" TEXT)";
    db.execSQL(sql);
    addQuestions();
    //db.close();
}
private void addQuestions()
{
    GkQuestion q1=new GkQuestion("1 .Who is the founder of"
+
        " Jainism?", "Guatama", "Mahavira", "Ashoka",
"Mahavira");
    this.addQuestion(q1);
    GkQuestion q2=new GkQuestion("2. Who compiled the tales
of " +
        "'The Panchatantra'?", "Valmiki", "Veda Vyasa",
"Vishnu Sharma", "Vishnu Sharma");
    this.addQuestion(q2);
    GkQuestion q3=new GkQuestion("3. Human Rights Day is" +
        " observed on?", "10th December", "10th
March", "10th July", "10th December");
    this.addQuestion(q3);
    GkQuestion q4=new GkQuestion("4. Who wrote Mitakshara, a
book" +
        " on Hindu law?", "Nayachandra", "Kumban",
"Vijnaneswara", "Vijnaneswara");
    this.addQuestion(q4);
    GkQuestion q5=new GkQuestion("5. Who founded the Hindu
Shahi " +
        "dynasty of
Punjab", "Vasumitra", "Kallar", "Jayapala", "Jayapala");
    this.addQuestion(q5);
    GkQuestion q6=new GkQuestion("6. Which was the first

```

country to" +
 " the Asian game?", "India", "Korea", "China", "India");
 this.addQuestion(q6);
 GkQuestion q7=new GkQuestion("7. PM of India 'Narendra
 Modi" +
 " belong to which party?
 ", "Congress", "BJP", "NCCP", "BJP");
 this.addQuestion(q7);
 GkQuestion q8=new GkQuestion("8. Who declared global
 emergency over " +
 "Zika virus spread on February 1,
 2016?", "Bangladesh", "European", "Colombia", "Colombia");
 this.addQuestion(q8);
 GkQuestion q9=new GkQuestion("9. The first Indian to win
 "+
 "Nobel Prize was?", "C.V Raman", "Rabindranath
 Tagore", "Amartya Sen", "Rabindranath Tagore");
 this.addQuestion(q9);
 GkQuestion q10=new GkQuestion("10. 12th South Asian
 game too place "+
 "in India int the State of", "Kolkata &
 Delhi", "Assam & Meghalaya", "Mizoram & Manipur", "Assam &
 Meghalaya");
 this.addQuestion(q10);
}
@Override
public void onUpgrade(SQLiteDatabase db, int oldV, int
newV) {
// Drop older table if existed
db.execSQL("DROP TABLE IF EXISTS " + TABLE_QUEST);
// Create tables again
onCreate(db);
}
// Adding new question
public void addQuestion(GkQuestion quest) {
//SQLiteDatabase db = this.getWritableDatabase();
ContentValues values = new ContentValues();
values.put(KEY_QUEST, quest.getQUESTION());
values.put(KEY_ANSWER, quest.getANSWER());
values.put(KEY_OPTA, quest.getOPTA());
values.put(KEY_OPTE, quest.getOPTE());
values.put(KEY_OPTC, quest.getOPTC());
// Inserting Row
db.insert(TABLE_QUEST, null, values);
}
public List<GkQuestion> getAllQuestions() {
List<GkQuestion> quesList = new ArrayList<GkQuestion>();
// Select All Query
String selectQuery = "SELECT * FROM " + TABLE_QUEST;

```

dbase=this.getReadableDatabase();
Cursor cursor = dbase.rawQuery(selectQuery, null); 49
// looping through all rows and adding to list
if (cursor.moveToFirst()) {
    do {
        GkQuestion quest = new GkQuestion();
        quest.setID(cursor.getInt(0));
        quest.setQUESTION(cursor.getString(1));
        quest.setANSWER(cursor.getString(2));
        quest.setOPTA(cursor.getString(3));
        quest.setOPTB(cursor.getString(4));
        quest.setOPTC(cursor.getString(5));
        quesList.add(quest);
    } while (cursor.moveToNext());
}
// return quest list
return quesList;
}

public int rowCount()
{
    int row=0;
    String selectQuery = "SELECT * FROM " + TABLE_QUEST;
    SQLiteDatabase db = this.getWritableDatabase();
    Cursor cursor = db.rawQuery(selectQuery, null);
    row=cursor.getCount();
    return row;
}
}

// Gk result activity
package com.example.lorita.quizgame;

import android.app.Activity;
import android.os.Bundle;
import android.widget.TextView;

public class GkResultActivity extends Activity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_gk_result);
        //get rating bar object

        //get text view
        TextView t=(TextView)findViewById(R.id.textResult);
        //get score
        Bundle b = getIntent().getExtras();
        int score= b.getInt("score");

        if (score == 0){
            t.setText("Score : "+score+"\n\nOops!");
        }
    }
}

```

```

    Better luck next time");
}
//display score
switch (score)
{
case 1:
case 2:
case 3:
case 4:
    t.setText("Score : "+score+" \n\nOops !
Better Luck Next Time!");
    break;
case 5:
case 6:
case 7:
case 8:
case 9:
case 10:
    t.setText("Score : "+score+ "\n\n
You win");
    break;
}
}

```

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// Graphical Question and answer of GK

```

<RelativeLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/b5"
    tools:context=".QuizActivity" >
    <LinearLayout
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentBottom="true"
        android:layout_alignParentLeft="true"
        android:layout_alignParentRight="true"
        android:layout_alignParentTop="true"
        android:orientation="vertical" >
        <TextView
            android:id="@+id/textView1"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="      aaaaaaa"
            android:textAppearance="?android:attr/textAppearanceLarge" />
        <RadioGroup
            android:id="@+id/radioGroup1"
            android:layout_width="match_parent"

```

```
    android:layout_height="wrap_content"
    android:layout_weight="0.01"
    android:paddingTop="20sp">>

    <RadioButton
        android:id="@+id/radio0"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:checked="false"
        android:textSize="15sp"
        android:textColor="@android:color/black"
        android:button="@drawable/radio_bg"
        android:paddingLeft="20dp"
        android:paddingTop="5sp"
        android:text="RadioButton" />

    <RadioButton
        android:id="@+id/radio1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:button="@drawable/radio_bg"
        android:textSize="15sp"
        android:textColor="@android:color/black"
        android:paddingLeft="20dp"
        android:paddingTop="5sp"
        android:text="RadioButton" />

    <RadioButton
        android:id="@+id/radio2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:textSize="15sp"
        android:textColor="@android:color/black"
        android:text="RadioButton"
        android:paddingLeft="20dp"
        android:paddingTop="5sp"
        android:button="@drawable/radio_bg"
        android:checked="false" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text=""
        android:textSize="15sp"
        android:textStyle="bold"
        android:paddingTop="10sp"
        android:textColor="@android:color/black"
        android:id="@+id/textView2"
        android:layout_gravity="center_horizontal" />

</RadioGroup>
```

```
<Button
    android:id="@+id/button1"
    android:layout_width="match_parent"
    android:layout_height="40dp"
    android:background="@drawable/bgk"
    android:text="@string/str_next" />
</LinearLayout>
</RelativeLayout>

// Gk result interface
<RelativeLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/b6"
    tools:context=".ResultActivity" >

    <LinearLayout
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentBottom="true"
        android:layout_alignParentLeft="true"
        android:layout_alignParentRight="true"
        android:layout_alignParentTop="true"
        android:orientation="vertical" >

        <TextView
            android:id="@+id/textResult"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_weight="0.08"
            android:paddingTop="30sp"
            android:textStyle="bold"
            android:textSize="20sp"
            android:text="" 

            android:textAppearance="?android:attr/textAppearanceLarge" />
        </LinearLayout>

    </RelativeLayout>

    // All String name and record are connect in String
```

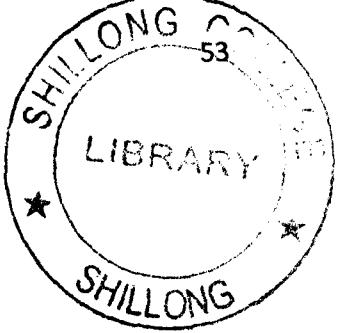
1 .Which of the following is NOT an astronomical object?

- Pulsar
- Brittle Star
- Black hole

ANSWER : Brittle Star

Score : 3

Oops! Better Luck Next Time!

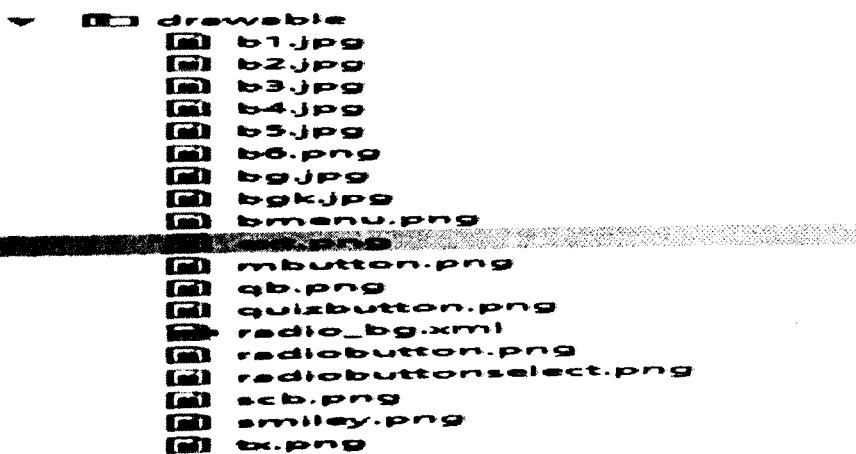


// All String name and record are connect in String

```
<resources>
    <string name="app_name">Quiz Game</string>

    <string name="action_settings">Settings</string>
    <string
name="title_activity_computer">ComputerActivity</string>
    <string name="title_activity_math">MathActivity</string>
    <string
name="title_activity_science">ScienceActivity</string>
    <string name="title_activity_gk">GkActivity</string>

    <string name="str_next">Next</string>
    <string name="title_activity_result">Results!!!</string>
</resources>
```



Conclusion

This game is simple and easier and it is good to learn, it helps for memorization, learn new things and improve the reasoning power

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