

University Students Coding Club needs an app for checking students' eligibility for the programming contest, students should enter their details in the Main Activity to do Registration, Student's: ID No, Name, section no., CGPA, and Programming language for coding. The programming language will be selected from drop down box and section no using radion button. on click of submit button Store the details in the database and notify to the user as "registration successful".

[A]In Activity 2, print the eligibility list and non-eligibility list of the Student's in a fragment: ID No, and name in two separate Text view.

Condition: if the CGPA is greater than 7.

[B] Display the total number of students who have taken Python in the second activity.

activity_main.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <EditText
        android:id="@+id/idnobtn"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="10"
        android:hint="enter id"
        android:inputType="text"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintBottom_toTopOf="@+id/namebtn"/>

    <EditText
        android:id="@+id/namebtn"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="10"
        android:hint="enter name"
        android:inputType="text"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/idnobtn"
        app:layout_constraintBottom_toTopOf="@+id/CGPAbtn"/>
```

```
<EditText
    android:id="@+id/CGPAbtn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:hint="cgpa score"
    android:inputType="text"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@id/namebtn"
    app:layout_constraintBottom_toTopOf="@id/rgbtn"/>
```

```
<RadioGroup
    android:id="@+id/rgbtn"
    android:layout_width="294dp"
    android:layout_height="164dp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/CGPAbtn"
    app:layout_constraintBottom_toTopOf="@+id/languagesbtn">
```

```
<RadioButton
    android:id="@+id/sec1btn"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="section1" />
```

```
<RadioButton
    android:id="@+id/sec2btn"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="section2"/>
```

```
</RadioGroup>
```

```
<Spinner
    android:id="@+id/languagesbtn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@id/rgbtn"
    app:layout_constraintBottom_toTopOf="@id/subbtn"/>
```

```

<Button
    android:id="@+id/subbtn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="submit"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toStartOf="@+id/btn2"
    app:layout_constraintTop_toBottomOf="@id/languagesbtn"
    app:layout_constraintBottom_toBottomOf="parent"/>

<Button
    android:id="@+id/btn2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Display1"
    app:layout_constraintStart_toEndOf="@+id/subbtn"
    app:layout_constraintEnd_toStartOf="@+id/disbtn"
    app:layout_constraintTop_toBottomOf="@id/languagesbtn"
    app:layout_constraintBottom_toBottomOf="parent"/>

<Button
    android:id="@+id/disbtn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Display2"
    app:layout_constraintStart_toEndOf="@+id/btn2"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@id/languagesbtn"
    app:layout_constraintBottom_toBottomOf="parent"/>
</androidx.constraintlayout.widget.ConstraintLayout>

```

MainActivity.java:

```

package com.example.forumclubregistration;

import androidx.annotation.RequiresApi;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.app.NotificationCompat;

import android.app.NotificationChannel;
import android.app.NotificationManager;
import android.content.Intent;
import android.os.Build;
import android.os.Bundle;
import android.view.View;

```

```

import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.Button;
import android.widget.EditText;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.Spinner;

public class MainActivity extends AppCompatActivity {
    EditText idval,nameval,cgpaval;
    RadioGroup rg;
    RadioButton rb;
    Spinner spn;
    Button sub,dis1,dis2;
    String[] lang={"Python","C#","java"};
    String slang;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        idval = findViewById(R.id.idnobtn);
        nameval = findViewById(R.id.namebtn);
        cgpaval = findViewById(R.id.CGPAbtn);
        rg = findViewById(R.id.rgbtn);
        spn = findViewById(R.id.languagesbtn);
        sub = findViewById(R.id.subbtn);
        dis1 = findViewById(R.id.btn2);
        dis2 = findViewById(R.id.disbtn);
        DBH db = new DBH(this,"ForumDB2",null,1);
        ArrayAdapter adapter = new
ArrayAdapter(this,android.R.layout.simple_spinner_dropdown_item,lang);
        spn.setAdapter(adapter);
        spn.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
            @Override
            public void onItemSelected(AdapterView<?> adapterView, View view, int i, long l) {
                slang = adapterView.getItemAtPosition(i).toString();
            }

            @Override
            public void onNothingSelected(AdapterView<?> adapterView) {

            }
        });
    }
};

```

```

rg.setOnCheckedChangeListener(new RadioGroup.OnCheckedChangeListener() {
    @Override
    public void onCheckedChanged(RadioGroup radioGroup, int i) {
        rb = findViewById(i);
    }
});
sub.setOnClickListener(new View.OnClickListener() {
    @RequiresApi(api = Build.VERSION_CODES.O)
    @Override
    public void onClick(View view) {
        String i = idval.getText().toString();
        String n = nameval.getText().toString();
        int c = Integer.parseInt(cgpaval.getText().toString());
        String s = rb.getText().toString();
        db.insertRecord(i,n,c,s,slang);
        String CH_ID = "my_ch";
        String CH_NAME = "My_Channel";
        int imp = NotificationManager.IMPORTANCE_HIGH;
        NotificationChannel channel = new NotificationChannel(CH_ID,CH_NAME,imp);
        NotificationManager mngr = (NotificationManager) getSystemService(NOTIFICATION_SERVICE);
        mngr.createNotificationChannel(channel);
        NotificationCompat.Builder builder = new NotificationCompat.Builder(MainActivity.this,CH_ID);
        builder.setSmallIcon(R.drawable.ic_launcher_background);
        builder.setContentTitle("Registration Status");
        builder.setContentText("Registration Successful");
        mngr.notify(100,builder.build());
    }
});
dis1.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        String rec = db.displayEligible();
        String rec1 = db.displayNonEligible();
        Intent it = new Intent(MainActivity.this, MainActivity2.class);
        it.putExtra("Records",rec);
        it.putExtra("Records1",rec1);
        startActivity(it);
    }
});
dis2.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        int rec = db.displayCount();
        Intent it = new Intent(MainActivity.this, MainActivity2.class);

```

```

        it.putExtra("Records",String.valueOf(rec));
        startActivity(it);
    }
    });
}
}

```

activity_main2.xml:

```

<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity2">

    <androidx.fragment.app.FragmentContainerView
        android:id="@+id/fragmentContainerView"
        android:name="com.example.forumclubregistration.BlankFragment"
        android:layout_width="300dp"
        android:layout_height="450dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>

```

MainActivity2.java:

```

package com.example.forumclubregistration;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;

public class MainActivity2 extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main2);
        Intent it1 = getIntent();
    }
}

```

```

        String r = it1.getStringExtra("Records");
        String r1 = it1.getStringExtra("Records1");
        Bundle bundle = new Bundle();
        bundle.putString("Rec",r);
        bundle.putString("Rec1",r1);
        BlankFragment frag = (BlankFragment)
getSupportFragmentManager().findFragmentById(R.id.fragmentContainerView);
        frag.setArguments(bundle);
    }
}

```

fragment_blank.xml:

```

<?xml version="1.0" encoding="utf-8"?>
<FrameLayout 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"
    tools:context=".BlankFragment">
    <!-- TODO: Update blank fragment layout -->

```

```

<TextView
    android:id="@+id/Result"
    android:layout_width="match_parent"
    android:layout_height="250dp"
    android:layout_gravity="top|center_vertical"
    android:textSize="18sp"
    android:textStyle="bold"
    android:textAlignment="center"/>

```

```

<TextView
    android:id="@+id/Result1"
    android:layout_width="match_parent"
    android:layout_height="250dp"
    android:layout_gravity="bottom|center_vertical"
    android:textSize="18sp"
    android:textStyle="bold"
    android:textAlignment="center"/>

```

```

</FrameLayout>

```

BlankFragment.java:

```

package com.example.forumclubregistration;

```

```

import android.os.Bundle;

import androidx.fragment.app.Fragment;

import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.TextView;

/**
 * A simple {@link Fragment} subclass.
 * Use the {@link BlankFragment#newInstance} factory method to
 * create an instance of this fragment.
 */
public class BlankFragment extends Fragment {
    TextView res,res1;
    // TODO: Rename parameter arguments, choose names that match
    // the fragment initialization parameters, e.g. ARG_ITEM_NUMBER
    private static final String ARG_PARAM1 = "param1";
    private static final String ARG_PARAM2 = "param2";

    // TODO: Rename and change types of parameters
    private String mParam1;
    private String mParam2;

    public BlankFragment() {
        // Required empty public constructor
    }

    /**
     * Use this factory method to create a new instance of
     * this fragment using the provided parameters.
     *
     * @param param1 Parameter 1.
     * @param param2 Parameter 2.
     * @return A new instance of fragment BlankFragment.
     */
    // TODO: Rename and change types and number of parameters
    public static BlankFragment newInstance(String param1, String param2) {
        BlankFragment fragment = new BlankFragment();
        Bundle args = new Bundle();
        args.putString(ARG_PARAM1, param1);
        args.putString(ARG_PARAM2, param2);
        fragment.setArguments(args);
    }

```



```

        return fragment;
    }

    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        if (getArguments() != null) {
            mParam1 = getArguments().getString(ARG_PARAM1);
            mParam2 = getArguments().getString(ARG_PARAM2);
        }
    }

    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
                             Bundle savedInstanceState) {
        // Inflate the layout for this fragment
        View v = inflater.inflate(R.layout.fragment_blank, container, false);
        res = v.findViewById(R.id.Result);
        res1 = v.findViewById(R.id.Result1);
        Bundle args = getArguments();
        String m = args.getString("Rec");
        String n = args.getString("Rec1");
        res.setText(m);
        res1.setText(n);
        return v;
    }
}

```

DBH.java:

```
package com.example.forumclubregistration;
```

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

```
import androidx.annotation.Nullable;
```

```
public class DBH extends SQLiteOpenHelper {
    public DBH(@Nullable Context context, @Nullable String name, @Nullable
SQLiteDatabase.CursorFactory factory, int version) {
        super(context, name, factory, version);
    }
}

```

```

@Override
public void onCreate(SQLiteDatabase sqLiteDatabase) {
    sqLiteDatabase.execSQL("create table reges(id varchar(20),name varchar(20),cgpa integer,sec
varchar(10),lang varchar(20))");
}

@Override
public void onUpgrade(SQLiteDatabase sqLiteDatabase, int i, int i1) {

}

public void insertRecord(String i,String n,int c,String s,String l){
    SQLiteDatabase db = this.getWritableDatabase();
    db.execSQL("insert into reges values('"+i+"','"+n+"','"+c+"','"+s+"','"+l+"')");
    db.close();
}

public String displayEligible(){
    String tdata = "";
    SQLiteDatabase db = this.getReadableDatabase();
    Cursor cr = db.rawQuery("select id,name from reges where cgpa > 7",null);
    while (cr.moveToNext()){
        String i = cr.getString(0);
        String n = cr.getString(1);
        tdata+=i+"\t"+n+"\n";
    }
    db.close();
    return tdata;
}

public String displayNonEligible(){
    String tdata = "";
    SQLiteDatabase db = this.getReadableDatabase();
    Cursor cr = db.rawQuery("select id,name from reges where cgpa <= 7",null);
    while (cr.moveToNext()){
        String i = cr.getString(0);
        String n = cr.getString(1);
        tdata+=i+"\t"+n+"\n";
    }
    db.close();
    return tdata;
}

public int displayCount(){
    int ct = 0;
    SQLiteDatabase db = this.getReadableDatabase();
    Cursor cr = db.rawQuery("select * from reges where lang = ?", new String[]{"Python"});
    while (cr.moveToNext())

```

```
        ct++;  
        db.close();  
        return ct;  
    }  
}
```