

NAME: AKSHATA

ROLLNO:20211CSE0208

SECTION:5CSE-4

CA1-QA

1.Design an android application for the Presidency University, so that the visitor can express their interest in a course and register their details. This will help the university to follow up later. The user will input their name telephone number, and course. Use radio buttons to get the gender of the user. On completing these details, get all the data and display it using the method "Display Activity". Use appropriate background images and a logo for the application.

1.MAINACTIVITY1.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"
    android:background="#6B0BCD4"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.452"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.046" />

    <EditText
        android:id="@+id/editTextText"
        android:layout_width="253dp"
        android:layout_height="55dp"
        android:ems="10"
        android:hint="Enter Name"
        android:inputType="text"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.759"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.205" />

    <EditText
        android:id="@+id/editTextText2"
        android:layout_width="258dp"
        android:layout_height="51dp"
        android:ems="10"
        android:hint="Enter Telephone Number"
        android:inputType="text"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
```

```

        app:layout_constraintHorizontal_bias="0.803"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.308" />

<Button
    android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:onClick="DisplayActivity"
    android:text="SUBMIT"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.526"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.642" />

<RadioGroup
    android:id="@+id/rg"
    android:layout_width="276dp"
    android:layout_height="48dp"
    android:orientation="horizontal"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.911"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.409">

    <RadioButton
        android:id="@+id/radioButton"
        android:layout_width="121dp"
        android:layout_height="50dp"
        android:text="Male" />

    <RadioButton
        android:id="@+id/radioButton2"
        android:layout_width="112dp"
        android:layout_height="48dp"
        android:text="Female" />

</RadioGroup>

<Spinner
    android:id="@+id/spinner"
    android:layout_width="267dp"
    android:layout_height="49dp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.888"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.523" />

<ImageView
    android:id="@+id/imageView"
    android:layout_width="344dp"
    android:layout_height="48dp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"

```

```
app:layout_constraintHorizontal_bias="0.422"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.023"
app:srcCompat="@drawable/p" />
```

<TextView

```
android:id="@+id/textView3"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:fontFamily="sans-serif-black"
android:text="REGISTRSTATION "
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.129" />
```

<TextView

```
android:id="@+id/textView4"
android:layout_width="82dp"
android:layout_height="44dp"
android:text="GENDER"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.088"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.413" />
```

<TextView

```
android:id="@+id/textView5"
android:layout_width="89dp"
android:layout_height="44dp"
android:text="COURSE"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.096"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.519" />
```

<TextView

```
android:id="@+id/textView6"
android:layout_width="82dp"
android:layout_height="43dp"
android:text="NAME"
android:textAlignment="textStart"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.094"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.202" />
```

<TextView

```
android:id="@+id/textView7"
android:layout_width="85dp"
android:layout_height="42dp"
android:text="NUMBER"
app:layout_constraintBottom_toBottomOf="parent"
```

```
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.087"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.307" />
```

```
</androidx.constraintlayout.widget.ConstraintLayout>
```

2.MAINACTIVITY2.JAVA:

```
package com.example.display_method;

import androidx.appcompat.app.AppCompatActivity;

import android.annotation.SuppressLint;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.AdapterView.Adapter;
import android.widget.ArrayAdapter;
import android.widget.Button;
import android.widget.EditText;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.Spinner;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {
    EditText ed1, ed2;
    Button button;
    RadioGroup rg;
    RadioButton rd;
    Spinner spinner;
    String selected_course;
    int mob_no;

    @SuppressLint("MissingInflatedId")
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        ed1 = findViewById(R.id.editTextText);
        ed2 = findViewById(R.id.editTextText2);
        button = findViewById(R.id.button);
        spinner = findViewById(R.id.spinner);
        rg = findViewById(R.id.rg);
        rg.setOnCheckedChangeListener(new
RadioGroup.OnCheckedChangeListener() {
            @Override
            public void onCheckedChanged(RadioGroup radioGroup, int i) {
                rd = findViewById(i);
            }
        });

        ArrayAdapter adapter = new ArrayAdapter<>(this,
android.R.layout.simple_spinner_dropdown_item,
getResources().getTextArray(R.array.Course));
```

```

adapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);
        spinner.setAdapter(adapter);
        spinner.setOnItemSelectedListener(new
AdapterView.OnItemSelectedListener() {
            @Override
            public void onItemSelected(AdapterView<?> adapterView, View
view, int i, long l) {
                selected_course =
adapterView.getItemAtPosition(i).toString();
            }

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

            }
        });
        button.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Intent intent=new
Intent(MainActivity.this,MainActivity2.class);
                String name=ed1.getText().toString();
                int num=Integer.parseInt(ed2.getText().toString());
                intent.putExtra("name",name);
                intent.putExtra("num",num);
                intent.putExtra("selected_course",selected_course);
                startActivity(intent);
            }
        });
    }
}

```

3.STRING.XML:

```

<resources>
    <string name="app_name">Display_method</string>
    <string-array name="Course">
        <item>C</item>
        <item>Java</item>
        <item>DBMS</item>
        <item>DataStructure</item>
    </string-array>
</resources>

```

4.MAINACTIVITY2.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"
    android:background="#8300BCD4"
    tools:context=".MainActivity2">

```

```

<TextView
    android:id="@+id/textView8"
    android:layout_width="245dp"
    android:layout_height="171dp"
    android:text="TextView"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.478" />

<TextView
    android:id="@+id/textView9"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:fontFamily="sans-serif-black"
    android:text="STUDENT DETAILS"
    android:textSize="20sp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.498"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.153" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

5.MAINACTIVITY2.JAVA:

```

package com.example.display_method;

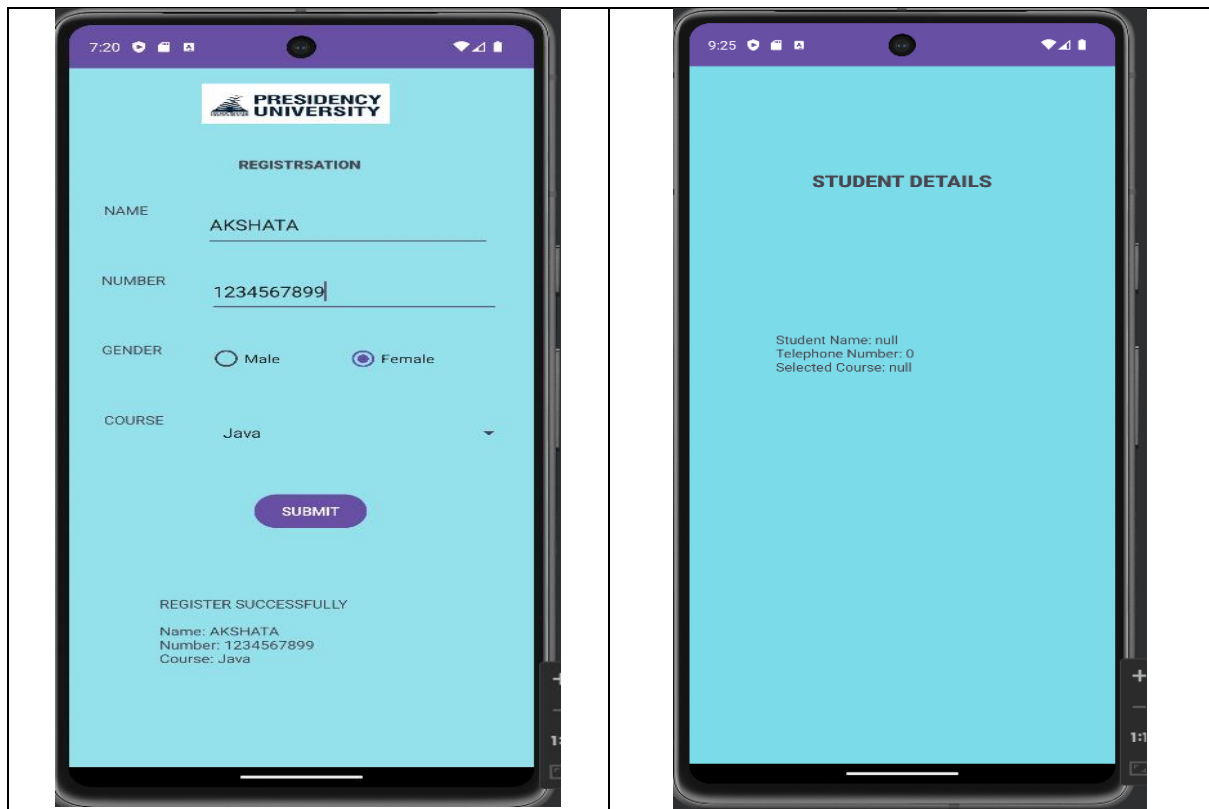
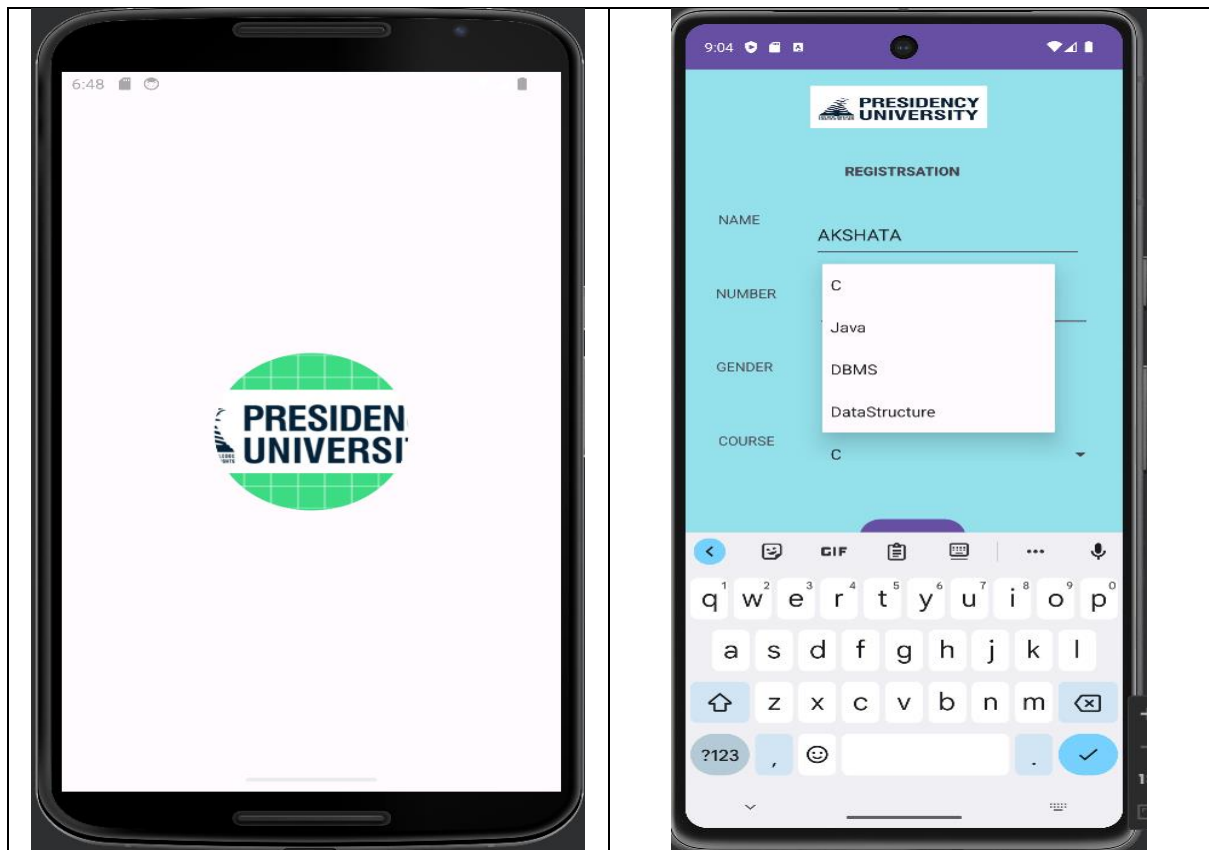
import androidx.appcompat.app.AppCompatActivity;

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

public class MainActivity2 extends AppCompatActivity {
    TextView tv;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main2);
        tv=findViewById(R.id.textView8);
        Intent intent=new Intent();
        String name=intent.getStringExtra("name");
        int num=intent.getIntExtra("num",0);
        String selected_course=intent.getStringExtra("selected_course");
        String rs="Student Name: "+name+"\nTelephone Number:
"+num+"\nSelected Course: "+selected_course;
        tv.setText(rs);
    }
}

```

6.OUTPUT:



CA1-QB

2. Design an android app for a Motor Insurance Company. The customer needs to input the Owner Name, Vehicle Number, Make and Model, Year of Model & car value. On getting these details, calculate the insurance amount the customer needs to pay. Display the details of the customer, vehicle & insurance amount. Consider the following details for calculating the insurance amount: *If the car is valued between one lakh & two lakhs, then generate a random value between 3000 & 4000. *If the car is valued between two lakh & four lakhs, then generate a random value between 4000 & 5000. *If the car is valued between four lakh & six lakhs, then generate a random value between 5000 & 7000. *If the car is valued between six lakh & ten lakhs, then generate a random value between 7000 & 10,000. *If the car is valued above ten lakhs, then calculate 10% as insurance amount. Set appropriate background image in both the activities and set the icon for the app.

1.MAINACTIVITY1.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"
android:background="#818BC34A"
tools:context=".MainActivity">

    <TextView
        android:id="@+id/textView"
        android:layout_width="266dp"
        android:layout_height="36dp"
        android:fontFamily="sans-serif-black"
        android:text="MOTOR INSURANCE COMPANY"
        android:textSize="16sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.497"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.038" />

    <EditText
        android:id="@+id/editTextText"
        android:layout_width="260dp"
        android:layout_height="63dp"
        android:ems="10"
        android:hint="Enter Name"
        android:inputType="text"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.576"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.122" />

    <EditText
        android:id="@+id/editTextText2"
        android:layout_width="260dp"
        android:layout_height="52dp"
        android:ems="10"
        android:hint="Vehicle Numbe"
```



```
    android:inputType="text"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.576"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.253" />
```

```
<EditText
    android:id="@+id/editTextText3"
    android:layout_width="260dp"
    android:layout_height="55dp"
    android:ems="10"
    android:hint="Model"
    android:inputType="text"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.576"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.359" />
```

```
<EditText
    android:id="@+id/editTextText4"
    android:layout_width="241dp"
    android:layout_height="61dp"
    android:ems="10"
    android:hint="Year"
    android:inputType="text"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.511"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.476" />
```

```
<EditText
    android:id="@+id/editTextText5"
    android:layout_width="237dp"
    android:layout_height="51dp"
    android:ems="10"
    android:hint="Value in Lakhs"
    android:inputType="text"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.522"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.591" />
```

```
<Button
    android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:shadowColor="#673AB7"
    android:text="Submit"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.717" />
```

```
</androidx.constraintlayout.widget.ConstraintLayout>
```

2.MAINACTIVITY1.JAVA:

```
package com.example.cal;

import androidx.appcompat.app.AppCompatActivity;

import android.annotation.SuppressLint;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {
    EditText ed1,ed2,ed3,ed4,ed5;
    Button button;
    double amt;
    @SuppressLint("MissingInflatedId")
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        ed1=findViewById(R.id.editTextText);
        ed2=findViewById(R.id.editTextText2);
        ed3=findViewById(R.id.editTextText3);
        ed4=findViewById(R.id.editTextText4);
        ed5=findViewById(R.id.editTextText5);
        button=findViewById(R.id.button);
        button.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String Name=ed1.getText().toString();
                int num=Integer.parseInt(ed2.getText().toString());
                String model=ed3.getText().toString();
                int year=Integer.parseInt(ed4.getText().toString());
                double value=Double.parseDouble(ed5.getText().toString());

                if ((value>=100000)&& (value<=200000))
                    amt=Math.random()*(4000-3000+1)+3000;
                else if ((value>=200000)&& (value<=400000)) {
                    amt=Math.random()*(5000-4000+1)+4000;
                } else if ((value>=400000)&& (value<=600000)) {
                    amt=Math.random()*(7000-5000+1)+5000;
                } else if ((value>=600000)&& (value<=1000000)) {
                    amt=Math.random()*(100000-7000+1)+7000;
                } else if (value>1000000){
                    amt=0.10* value;
                }
                Intent intent=new
Intent(MainActivity.this,MainActivity2.class);
                intent.putExtra("Name",Name);
                intent.putExtra("num",num);
                intent.putExtra("model",model);
                intent.putExtra("year",year);
                intent.putExtra("value",value);
                intent.putExtra("amt",amt);
```

```

        startActivity(intent);
    }
    });
}
}

```

3.MAINACTIVITY2.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"
android:background="#6F8BC34A"
tools:context=".MainActivity2">

    <TextView
        android:id="@+id/textView2"
        android:layout_width="254dp"
        android:layout_height="165dp"
        android:text="TextView"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.496"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.395" />

    <TextView
        android:id="@+id/textView3"
        android:layout_width="232dp"
        android:layout_height="47dp"
        android:fontFamily="sans-serif-black"
        android:text="CAR OWNER DETAILS"
        android:textSize="20sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.558"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.121" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

4.MAINACTIVITY2.JAVA

```

package com.example.display_method;

import androidx.appcompat.app.AppCompatActivity;

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

public class MainActivity2 extends AppCompatActivity {
    TextView tv;
    @Override
    protected void onCreate(Bundle savedInstanceState) {

```

```

super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main2);
tv=findViewById(R.id.textView8);
Intent intent=new Intent();
String name=intent.getStringExtra("name");
int num=intent.getIntExtra("num",0);
String selected_course=intent.getStringExtra("selected_course");
String rs="Student Name: "+name+"\nTelephone Number:
"+num+"\nSelected Course: "+selected_course;
tv.setText(rs);
}
}

```

5.OUTPUT:

