

MOBILE APPLICATION DEVELOPMENT
LAB MANUAL
PGM1: GREATEST AMONG THREE NUMBERS

XML CODE:

```
<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/num1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:inputType="number"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.542"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.109" />

<EditText
    android:id="@+id/num2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:inputType="number"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.542"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/num1"
    app:layout_constraintVertical_bias="0.035" />

<Button
    android:id="@+id/btn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="calculate"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.529"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/num2"
    app:layout_constraintVertical_bias="0.153" />

<TextView
```

```

        android:id="@+id/tv"
        android:layout_width="275dp"
        android:layout_height="100dp"
        android:layout_marginTop="32dp"
        android:textSize="32sp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.535"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/btn"
        app:layout_constraintVertical_bias="0.05" />

<EditText
    android:id="@+id/num3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:inputType="number"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.542"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/num2"
    app:layout_constraintVertical_bias="0.035" />

</androidx.constraintlayout.widget.ConstraintLayout>

```

JAVA CODE:

```

package com.example.addingtwonumbers;

import androidx.appcompat.app.AppCompatActivity;

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 {

    private EditText n1;
    private EditText n2;
    private EditText n3;
    private Button calc;
    private TextView result;

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

        n1=(EditText) findViewById(R.id.num1);
        n2=(EditText) findViewById(R.id.num2);
        n3=(EditText) findViewById(R.id.num3);

        calc=(Button) findViewById(R.id.btn);
        result=(TextView) findViewById(R.id.tv);
    }
}

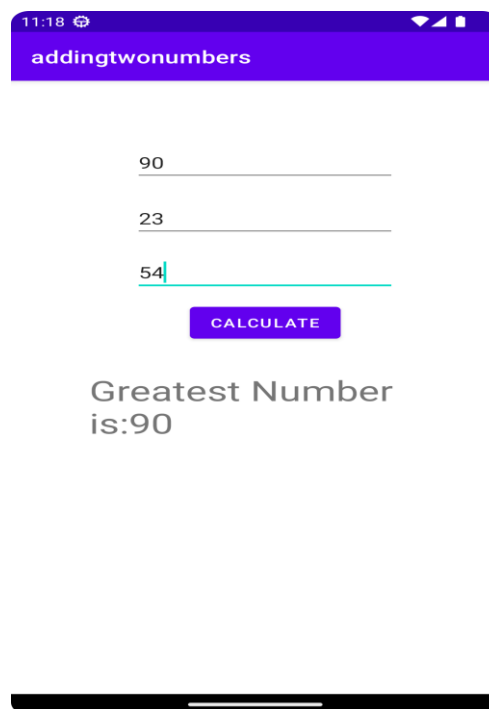
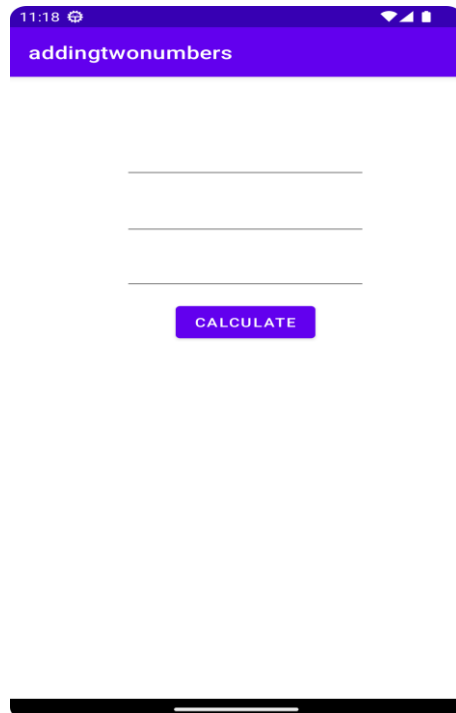
```

```

    calc.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            int number1=Integer.parseInt(n1.getText().toString());
            int number2=Integer.parseInt(n2.getText().toString());
            int number3=Integer.parseInt(n3.getText().toString());
            if(number1>number2)
                result.setText("Greatest Number is:"+number1);
            else if(number2 > number3)
                result.setText("Greatest Number is:"+number2);
            else
                result.setText("Greatest Number is:"+number3);
        }
    });
}
}

```

OUTPUT



PGM2: DISPLAYING PERSONAL DETAILS

XML CODE:

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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"
    android:orientation="vertical"
    android:gravity="center"
    android:padding="10dp">

    <EditText
        android:id="@+id/nameET"
        android:hint="Enter Name"
        android:inputType="text"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"/>
    <EditText
        android:id="@+id/emailET"
        android:hint="Enter EMail"
        android:inputType="textEmailAddress"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"/>
    <EditText
        android:id="@+id/phoneET"
        android:hint="Enter Phone Number"
        android:inputType="phone"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"/>
    <Button
        android:id="@+id/saveBtn"
        android:text="Save"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"/>

</LinearLayout>
```

activity_second.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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:orientation="vertical"
    android:gravity="center"
    android:padding="10dp"
    tools:context=".secondActivity">

    <TextView
        android:id="@+id/resultTV"
        android:layout_width="match_parent"
        android:layout_height="200dp"
```

```

        android:textSize="30sp"
        android:textStyle="bold"/>
</LinearLayout>

```

JAVA CODE:

MainActivity.java

```

package com.example.personal_details;

import androidx.appcompat.app.ActionBar;
import androidx.appcompat.app.AppCompatActivity;

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

public class MainActivity extends AppCompatActivity {

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

        ActionBar actionBar =getSupportActionBar();
        actionBar.setTitle("First Activity");

        EditText mNameET=findViewById(R.id.nameET);
        EditText mEmailET=findViewById(R.id.emailET);
        EditText mPhoneET=findViewById(R.id.phoneET);

        Button mSaveBtn=findViewById(R.id.saveBtn);

        mSaveBtn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                //get data from EditText
                String name=mNameET.getText().toString();
                String email=mEmailET.getText().toString();
                String phone=mPhoneET.getText().toString();

                //Intent activity
                Intent intent=new
Intent(MainActivity.this,secondActivity.class);
                intent.putExtra("NAME",name);
                intent.putExtra("EMAIL",email);
                intent.putExtra("PHONE",phone);
                startActivity(intent);
            }
        });
    }
}

```

secondActivity.java

```
package com.example.personal_details;

import androidx.appcompat.app.ActionBar;
import androidx.appcompat.app.AppCompatActivity;

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

public class secondActivity extends AppCompatActivity {

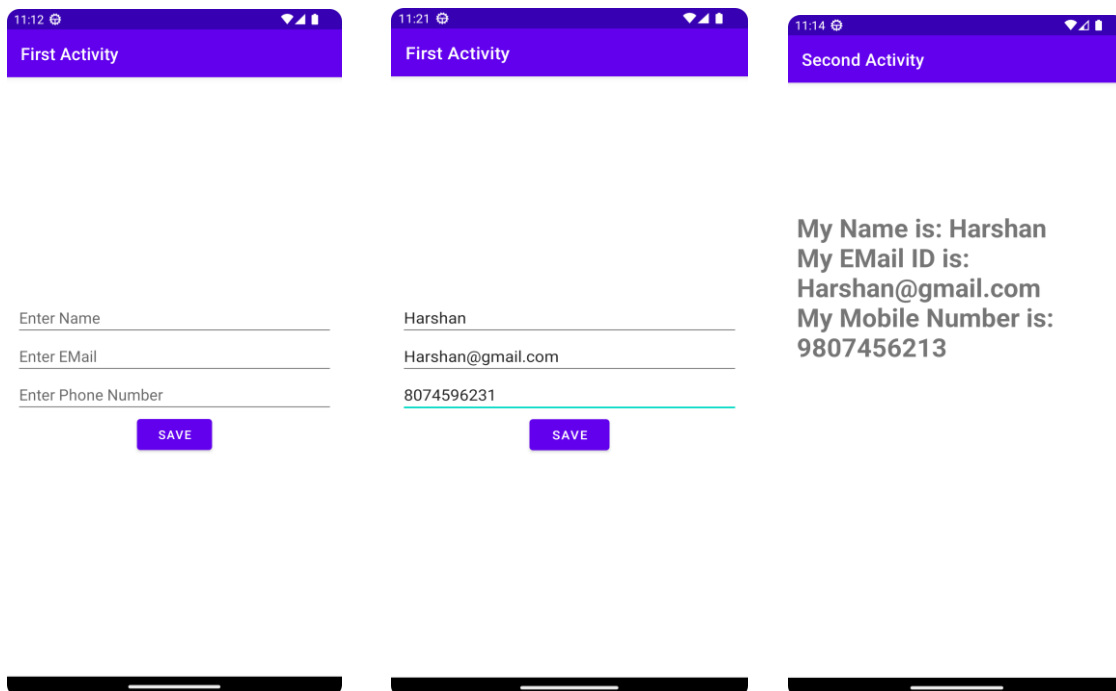
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_second);

        ActionBar actionBar =getSupportActionBar();
        actionBar.setTitle("Second Activity");

        //intent to get data
        Intent intent=getIntent();
        String name=intent.getStringExtra("NAME");
        String email=intent.getStringExtra("EMAIL");
        String phone=intent.getStringExtra("PHONE");

        TextView mResultTY=findViewById(R.id.resultTV);
        mResultTY.setText("My Name is: "+name+"\nMy EMail ID is: "+email+"\nMy Mobile Number is: "+phone);
    }
}
```

OUTPUT



PGM3: USE OF RADIO BUTTONS

XML CODE:

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout
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">

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Select your Subject ?"
    android:textStyle="bold"
    android:layout_marginLeft="10dp"
    android:textSize="20sp"/>

<!-- add RadioGroup which contain the many RadioButton-->
<RadioGroup
    android:layout_marginTop="50dp"
    android:id="@+id/groupradio"
    android:layout_marginLeft="10dp"
    android:layout_width="fill_parent"
    android:layout_height="wrap_content">

    <!-- In RadioGroup create the 1 Radio Button-->
    <!-- like this we will add some more Radio Button-->
    <RadioButton
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:id="@+id/radia_id1"
        android:text="DBMS"
        android:textSize="20sp"/>

    <RadioButton
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:id="@+id/radia_id2"
        android:text="C/C++ Programming"
        android:textSize="20sp"/>

    <RadioButton
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:id="@+id/radia_id3"
        android:text="Data Structure"
        android:textSize="20sp"/>

    <RadioButton
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:id="@+id/radia_id4"
        android:text="Algorithms"
        android:textSize="20sp"/>
</RadioGroup>
```

```

<!-- add button For Submit the Selected item-->
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Submit"
    android:id="@+id/submit"
    android:textStyle="bold"
    android:textSize="20sp"
    android:layout_marginTop="300dp"
    android:layout_marginLeft="180dp"
/>

<!-- add clear button for clear the selected item-->
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Clear"
    android:id="@+id/clear"
    android:textSize="20sp"
    android:textStyle="bold"
    android:layout_marginTop="300dp"
    android:layout_marginLeft="20dp"
/>

</RelativeLayout>

```

JAVA CODE:

```

package com.example.myapplication;

import static android.widget.Toast.*;

import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.Toast;

import com.example.myapplication.R;

public class MainActivity extends AppCompatActivity {

    // Define the object for Radio Group,
    // Submit and Clear buttons
    private RadioGroup radioGroup;
    Button submit, clear;

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

        // Bind the components to their respective objects
        // by assigning their IDs
    }
}

```



```

        // with the help of findViewById() method
submit = (Button)findViewById(R.id.submit);
clear = (Button)findViewById(R.id.clear);
radioGroup = (RadioGroup)findViewById(R.id.groupradio);

// Uncheck or reset the radio buttons initially
radioGroup.clearCheck();

// Add the Listener to the RadioGroup
radioGroup.setOnCheckedChangeListener(
    new RadioGroup
        .OnCheckedChangeListener() {
            @Override

            // The flow will come here when
            // any of the radio buttons in the radioGroup
            // has been clicked

            // Check which radio button has been clicked
            public void onCheckedChanged(RadioGroup group,
                int checkedId)
            {

                // Get the selected Radio Button
                RadioButton
                    radioButton
                    = (RadioButton)group
                    .findViewById(checkedId);

            }
        });

// Add the Listener to the Submit Button
submit.setOnClickListener(new View.OnClickListener() {

    @Override
    public void onClick(View v)
    {

        // When submit button is clicked,
        // Get the Radio Button which is set
        // If no Radio Button is set, -1 will be returned
        int selectedId = radioGroup.getCheckedRadioButtonId();
        if (selectedId == -1) {
            Toast.makeText(MainActivity.this, "No answer has been
selected", Toast.LENGTH_SHORT).show();
        }
        else {

            RadioButton radioButton
                = (RadioButton)radioGroup
                .findViewById(selectedId);

            // Now display the value of selected item
            // by the Toast message
            Toast.makeText(MainActivity.this,
radioButton.getText(), Toast.LENGTH_SHORT).show();

        }
    }
});

// Add the Listener to the Submit Button

```

```

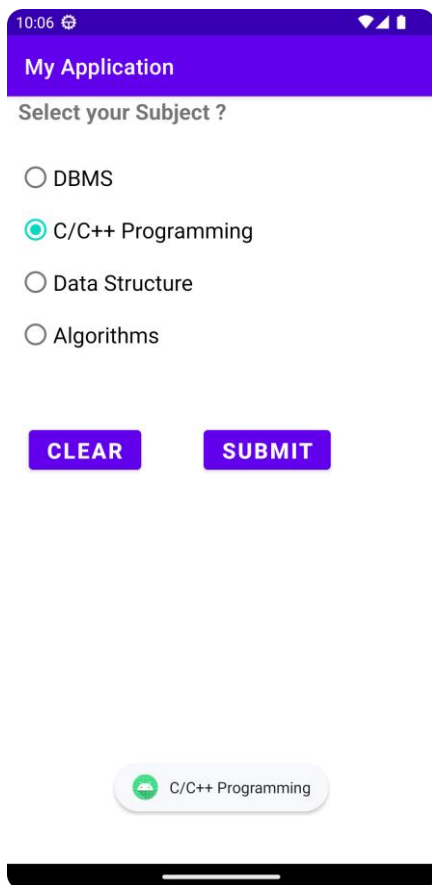
clear.setOnClickListener(new View.OnClickListener() {

    @Override
    public void onClick(View v)
    {

        // Clear RadioGroup
        // i.e. reset all the Radio Buttons
        radioGroup.clearCheck();
    }
});
}
}

```

OUTPUT



PGM4: USE OF IMAGE BUTTON

XML CODE:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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:orientation="vertical"
    tools:context=".MainActivity">

    <ImageButton
        android:id="@+id/ImageBtn"
        android:layout_width="300dp"
        android:layout_height="90dp"
        android:layout_gravity="center"
        android:layout_marginTop="200dp"
        android:src="@drawable/panda"
    />

</LinearLayout>
```

JAVA CODE:

```
package com.example.image_button;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.ImageButton;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    ImageButton img;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        img=findViewById(R.id.ImageBtn);
        img.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Toast.makeText(getApplicationContext(),"Image Button is
Clicked", Toast.LENGTH_LONG).show();
                //Toast.makeText(MainActivity.this,"Image Button is
Clicked", Toast.LENGTH_LONG.show());
            }
        });
    }
}
```

OUTPUT



Image Button is Clicked



PGM5: Develop an application that uses Alert Dialogbox in android studio

XML code

```
<?xml version="1.0" encoding="utf-8"?>
<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"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="180dp"
        android:gravity="center_horizontal"
        android:text="Press The Back Button of Your Phone."
        android:textSize="30dp"
        android:textStyle="bold" />
</RelativeLayout>
```

Java code

```
package com.example.test;

import androidx.appcompat.app.AlertDialog;
import androidx.appcompat.app.AppCompatActivity;

import android.content.DialogInterface;

import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
    @Override
    public void onBackPressed () {
        // Create the object of AlertDialog Builder class
        AlertDialog.Builder builder = new
AlertDialog.Builder(MainActivity.this);

        // Set the message show for the Alert time
        builder.setMessage("Do you want to exit ?");

        // Set Alert Title
        builder.setTitle("Alert !");

        // Set Cancelable false for when the user clicks on the outside the
```

```

Dialog Box then it will remain show
    builder.setCancelable(false);

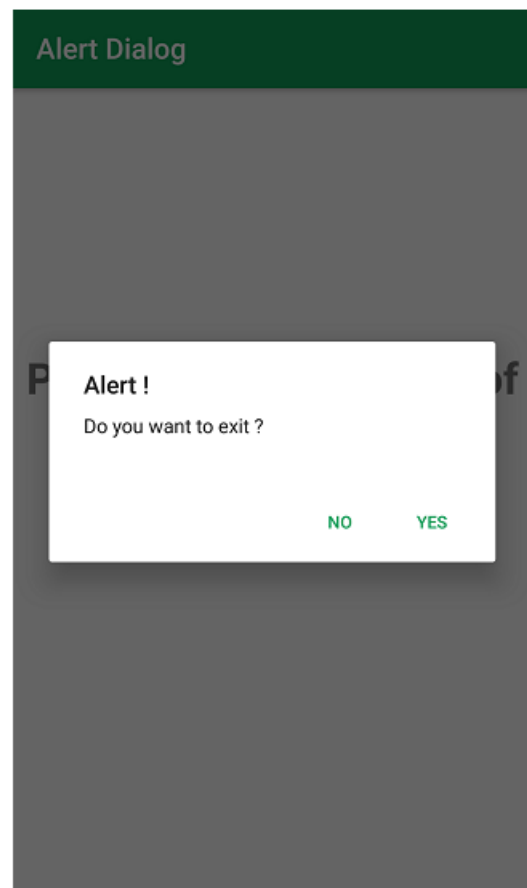
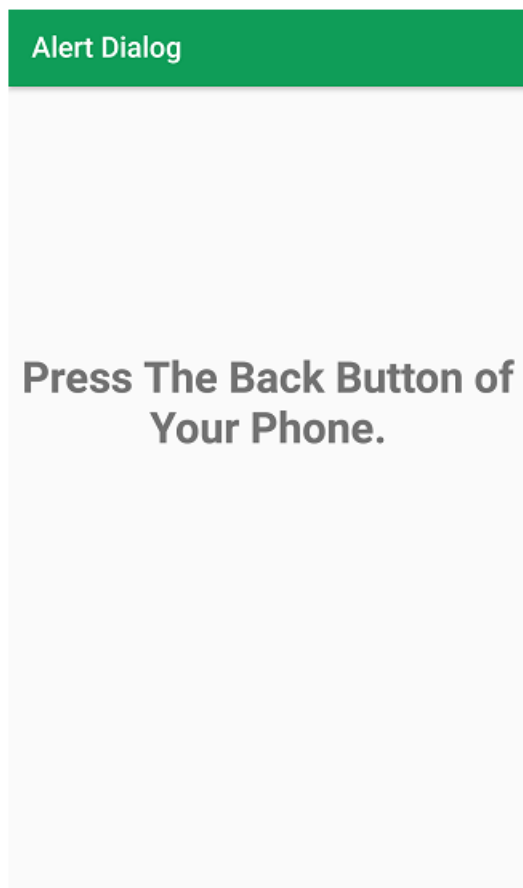
    // Set the positive button with yes name Lambda OnClickListener
    method is use of DialogInterface interface.
    builder.setPositiveButton("Yes", (DialogInterface.OnClickListener)
(dialog, which) -> {
        // When the user click yes button then app will close
        finish();
    });

    // Set the Negative button with No name Lambda OnClickListener
    method is use of DialogInterface interface.
    builder.setNegativeButton("No", (DialogInterface.OnClickListener)
(dialog, which) -> {
        // If user click no then dialog box is canceled.
        dialog.cancel();
    });

    // Create the Alert dialog
    AlertDialog alertDialog = builder.create();
    // Show the Alert Dialog box
    alertDialog.show();
}
}

```

OutPut:



PGM6: Develop an application that uses layout manager

XML code

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<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"
    tools:context=".MainActivity">

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="100dp">
        <TextView
            android:id="@+id/textView"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_margin="30dp"
            android:text="Details Form"
            android:textSize="25sp"
            android:gravity="center"/>
    </LinearLayout>

    <GridLayout
        android:id="@+id/gridLayout"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:layout_marginTop="100dp"
        android:layout_marginBottom="200dp"
        android:columnCount="2"
        android:rowCount="3">
        <TextView
            android:id="@+id/textView1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_margin="10dp"
            android:layout_row="0"
            android:layout_column="0"
            android:text="Name"
            android:textSize="20sp"
            android:gravity="center"/>

        <EditText
            android:id="@+id/editText"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_margin="10dp"
            android:layout_row="0"
            android:layout_column="1"
            android:ems="10"/>

        <TextView
            android:id="@+id/textView2"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
```

```

        android:layout_margin="10dp"
        android:layout_row="1"
        android:layout_column="0"
        android:text="Reg.No"
        android:textSize="20sp"
        android:gravity="center"/>

<EditText
    android:id="@+id/editText2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_margin="10dp"
    android:layout_row="1"
    android:layout_column="1"
    android:inputType="number"
    android:ems="10"/>

<TextView
    android:id="@+id/textView3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_margin="10dp"
    android:layout_row="2"
    android:layout_column="0"
    android:text="Dept"
    android:textSize="20sp"
    android:gravity="center"/>

<Spinner
    android:id="@+id/spinner"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_margin="10dp"
    android:layout_row="2"
    android:layout_column="1"
    android:spinnerMode="dropdown"/>

</GridLayout>

<Button
    android:id="@+id/button"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentBottom="true"
    android:layout_centerInParent="true"
    android:layout_marginBottom="150dp"
    android:text="Submit"/>

</RelativeLayout>

```


activity_second.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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=".Second"
    android:orientation="vertical"
    android:gravity="center">

    <TextView
        android:id="@+id/textView1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_margin="20dp"
        android:text="New Text"
        android:textSize="30sp"/>

    <TextView
        android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_margin="20dp"
        android:text="New Text"
        android:textSize="30sp"/>

    <TextView
        android:id="@+id/textView3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_margin="20dp"
        android:text="New Text"
        android:textSize="30sp"/>

</LinearLayout>
```

Java Code:

MainActivity.Java

```
package com.example.test;

import androidx.appcompat.app.AlertDialog;
import androidx.appcompat.app.AppCompatActivity;

import android.content.DialogInterface;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.ArrayAdapter;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Spinner;
```

```

public class MainActivity extends AppCompatActivity {
    EditText e1,e2;
    Button bt;
    Spinner s;

    //Data for populating in Spinner
    String [] dept_array={"CSE","ECE","IT","Mech","Civil"};

    String name,reg,dept;

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

        //Referring the Views
        e1= (EditText) findViewById(R.id.editText);
        e2= (EditText) findViewById(R.id.editText2);

        bt= (Button) findViewById(R.id.button);

        s= (Spinner) findViewById(R.id.spinner);

        //Creating Adapter for Spinner for adapting the data from array to
        Spinner
        ArrayAdapter adapter= new
        ArrayAdapter(MainActivity.this,android.R.layout.simple_spinner_item,dept_ar
        ray);
        s.setAdapter(adapter);

        //Creating Listener for Button
        bt.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {

                //Getting the Values from Views(Edittext & Spinner)
                name=e1.getText().toString();
                reg=e2.getText().toString();
                dept=s.getSelectedItem().toString();

                //Intent For Navigating to Second Activity
                Intent i = new Intent(MainActivity.this,Second.class);

                //For Passing the Values to Second Activity
                i.putExtra("name_key", name);
                i.putExtra("reg_key",reg);
                i.putExtra("dept_key", dept);

                startActivity(i);

            }
        });
    }
}

```

SecondActivity.java

```
package com.example.test;

import androidx.appcompat.app.ActionBar;
import androidx.appcompat.app.AppCompatActivity;

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

public class Second extends AppCompatActivity {

    TextView t1,t2,t3;

    String name,reg,dept;

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

        t1= (TextView) findViewById(R.id.textView1);
        t2= (TextView) findViewById(R.id.textView2);
        t3= (TextView) findViewById(R.id.textView3);

        //Getting the Intent
        Intent i = getIntent();

        //Getting the Values from First Activity using the Intent received
        name=i.getStringExtra("name_key");
        reg=i.getStringExtra("reg_key");
        dept=i.getStringExtra("dept_key");

        //Setting the Values to Intent
        t1.setText(name);
        t2.setText(reg);
        t3.setText(dept);
    }
}
```

Output:

This screenshot shows the initial state of the 'Details Form' in an Android application. The app's title bar is blue with the text 'ex.no.2'. The status bar at the top shows a 93% battery level and the time 11:48. The form itself has a light gray background and contains three input fields: 'Name' (empty), 'Reg.No' (empty), and 'Dept' (set to 'CSE' with a dropdown arrow). A 'SUBMIT' button is located at the bottom of the form.

This screenshot shows the 'Details Form' after it has been filled out. The 'Name' field contains 'devang', the 'Reg.No' field contains '111512104049', and the 'Dept' dropdown is still set to 'CSE'. The 'SUBMIT' button remains visible at the bottom. The status bar now shows the time as 11:50.

This screenshot shows the result of clicking the 'SUBMIT' button. The form fields are no longer visible; instead, the data entered is displayed in large, centered text: 'devang', '111512104049', and 'CSE'. The app title 'ex.no.2' and the status bar (showing 11:50 and 93% battery) are still present.

PGM7: USE OF AUDIO MODE

XML code

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout android:layout_width="match_parent"
    android:layout_height="match_parent"
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical">
    <Button
        android:layout_width="match_parent"
        android:layout_height="100dp"
        android:id="@+id/bt1"
        android:text="CURRENT MODE CHECK"
        android:onClick="onMode"/>
    <Button
        android:layout_width="match_parent"
        android:layout_height="100dp"
        android:id="@+id/bt2"
        android:text="RINGER MODE"
        android:onClick="onRing"/>
    <Button
        android:layout_width="match_parent"
        android:layout_height="100dp"
        android:id="@+id/bt3"
        android:text="SILENT MODE"
        android:onClick="onSilent"/>
    <Button
        android:layout_width="match_parent"
        android:layout_height="100dp"
        android:id="@+id/bt4"
        android:text="VIBRATE MODE"
        android:onClick="onVibrate"/>
</LinearLayout>
```

Java code

```
package com.example.audio_phone;

import android.content.Context;
import android.media.AudioManager;
import android.os.Bundle;
import android.view.View;
import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    private AudioManager myAudioManager;
```

```

    /** Called when the activity is first created. */
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        myAudioManager =
(AudioManager) getSystemService(Context.AUDIO_SERVICE);
    }
    public void onMode(View v)
    {
        int mod=myAudioManager.getRingerMode();

        if(mod==AudioManager.RINGER_MODE_VIBRATE){
            Toast.makeText(this,"Now in Vibrate
Mode",Toast.LENGTH_LONG).show();
        }

        else if(mod==AudioManager.RINGER_MODE_NORMAL){
            Toast.makeText(this,"Now in Ringing
Mode",Toast.LENGTH_LONG).show();
        }

        else
        {
            Toast.makeText(this,"Now in Silent
Mode",Toast.LENGTH_LONG).show();
        }
    }
    public void onRing(View v)
    {
        myAudioManager.setRingerMode(AudioManager.RINGER_MODE_NORMAL);
        Toast.makeText(this,"Now in Ringing
Mode",Toast.LENGTH_LONG).show();
    }
    public void onSilent(View v)
    {
        myAudioManager.setRingerMode((AudioManager.RINGER_MODE_SILENT));
        Toast.makeText(this,"Now in silent Mode",Toast.LENGTH_LONG).show();
    }
    public void onVibrate(View v)
    {
        myAudioManager.setRingerMode(AudioManager.RINGER_MODE_VIBRATE);
        Toast.makeText(this,"Now in Vibrate
Mode",Toast.LENGTH_LONG).show();
    }
}

```

OUTPUT

