

PROGRAM 1

AIM:

Design a registration activity and store registration details in local memory of phone using Intents and SharedPreferences.

activity_main.xml	<pre><?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="#FFFFFF" tools:context=".MainActivity"> <EditText android:id="@+id/name" android:layout_width="213dp" android:layout_height="46dp" android:ems="10" android:inputType="textPersonName" android:textSize="22sp" android:textStyle="bold italic" app:layout_constraintBottom_toBottomOf="parent" app:layout_constraintEnd_toEndOf="parent" app:layout_constraintHorizontal_bias="0.919" app:layout_constraintStart_toStartOf="parent" app:layout_constraintTop_toTopOf="parent" app:layout_constraintVertical_bias="0.278" tools:ignore="SpeakableTextPresentCheck,TouchTargetSizeCheck" /> <EditText android:id="@+id/mob" android:layout_width="213dp" android:layout_height="41dp" android:ems="10" android:inputType="textPersonName" android:textSize="20sp" android:textStyle="bold italic" app:layout_constraintBottom_toBottomOf="parent" app:layout_constraintEnd_toEndOf="parent" app:layout_constraintHorizontal_bias="0.919" app:layout_constraintStart_toStartOf="parent"</pre>
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```
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.43"

    tools:ignore="SpeakableTextPresentCheck,TouchTargetSizeCheck"
/>

<TextView
    android:id="@+id/textView1"
    android:layout_width="136dp"
    android:layout_height="39dp"
    android:background="#009688"
    android:text="Address"
    android:textAlignment="center"
    android:textColor="#FFFFFF"
    android:textSize="22sp"
    android:textStyle="bold"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.058"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.352" />

<TextView
    android:id="@+id/textView"
    android:layout_width="136dp"
    android:layout_height="39dp"
    android:background="#009688"
    android:text="Name"
    android:textAlignment="center"
    android:textColor="#FFFFFF"
    android:textSize="22sp"
    android:textStyle="bold"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.058"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.277" />

<TextView
    android:id="@+id/textView3"
    android:layout_width="136dp"
    android:layout_height="39dp"
    android:background="#009688"
    android:text="Email"
    android:textAlignment="center"
    android:textColor="#FFFFFF"
    android:textSize="22sp"
    android:textStyle="bold"
```

```
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.058"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

<TextView
    android:id="@+id/textView4"
    android:layout_width="136dp"
    android:layout_height="39dp"
    android:background="#009688"
    android:text="Password"
    android:textAlignment="center"
    android:textColor="#FFFFFF"
    android:textSize="22sp"
    android:textStyle="bold"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.058"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.573" />

<TextView
    android:id="@+id/textView2"
    android:layout_width="136dp"
    android:layout_height="39dp"
    android:background="#009688"
    android:text="Mobile No."
    android:textAlignment="center"
    android:textColor="#FFFFFF"
    android:textSize="22sp"
    android:textStyle="bold"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.058"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.429" />

<TextView
    android:layout_width="413dp"
    android:layout_height="64dp"
    android:background="#009688"
    android:text="REGISTER"
    android:textAlignment="center"
    android:textColor="#FFFFFF"
    android:textSize="30sp"
    android:textStyle="bold|italic"
    app:layout_constraintBottom_toBottomOf="parent"
```

```
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.002" />

    <EditText
        android:id="@+id/email"
        android:layout_width="213dp"
        android:layout_height="41dp"
        android:ems="10"
        android:inputType="textPersonName"
        android:textStyle="bold|italic"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.919"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.501"

        tools:ignore="TouchTargetSizeCheck,SpeakableTextPresentCheck"
        android:textSize="22sp" />

    <EditText
        android:id="@+id/add"
        android:layout_width="213dp"
        android:layout_height="41dp"
        android:ems="10"
        android:inputType="textPersonName"
        android:textSize="22sp"
        android:textStyle="bold|italic"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.919"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.353"

        tools:ignore="TouchTargetSizeCheck,SpeakableTextPresentCheck"
    />

    <Button
        android:id="@+id/login"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:onClick="onSubmit"
        android:text="Login"
        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="0.732" />

<EditText
    android:id="@+id/pass"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:inputType="textPassword"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.905"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.578" />

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

```
Activity_Reg_Details.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=".Reg_Details">

    <EditText
        android:id="@+id/email"
        android:layout_width="213dp"
        android:layout_height="41dp"
        android:ems="10"
        android:inputType="textPersonName"
        android:textSize="22sp"
        android:textStyle="bold|italic"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="1.0"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.489"

        tools:ignore="TouchTargetSizeCheck,SpeakableTextPresentCheck"
    />

    <EditText
        android:id="@+id/name"
        android:layout_width="213dp"
        android:layout_height="41dp"
```

```
        android:ems="10"
        android:inputType="textPersonName"
        android:textSize="22sp"
        android:textStyle="bold|italic"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="1.0"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.278"

    tools:ignore="TouchTargetSizeCheck,SpeakableTextPresentCheck"
    />

<EditText
    android:id="@+id/add"
    android:layout_width="213dp"
    android:layout_height="41dp"
    android:ems="10"
    android:inputType="textPersonName"
    android:textSize="22sp"
    android:textStyle="bold|italic"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="1.0"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.35"

    tools:ignore="TouchTargetSizeCheck,SpeakableTextPresentCheck"
    />

<EditText
    android:id="@+id/mob"
    android:layout_width="213dp"
    android:layout_height="41dp"
    android:ems="10"
    android:inputType="textPersonName"
    android:textSize="20sp"
    android:textStyle="bold|italic"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="1.0"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.43"

    tools:ignore="SpeakableTextPresentCheck,TouchTargetSizeCheck"
    />
```

```
<TextView  
    android:id="@+id/textView8"  
    android:layout_width="136dp"  
    android:layout_height="39dp"  
    android:background="#009688"  
    android:text="Email"  
    android:textAlignment="center"  
    android:textColor="#FFFFFF"  
    android:textSize="20sp"  
    android:textStyle="bold"  
    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" />  
  
<TextView  
    android:id="@+id/textView7"  
    android:layout_width="136dp"  
    android:layout_height="39dp"  
    android:background="#009688"  
    android:text="Name"  
    android:textAlignment="center"  
    android:textColor="#FFFFFF"  
    android:textSize="20sp"  
    android:textStyle="bold"  
    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="0.277" />  
  
<TextView  
    android:id="@+id/textView11"  
    android:layout_width="136dp"  
    android:layout_height="39dp"  
    android:background="#009688"  
    android:text="Mobile No."  
    android:textAlignment="center"  
    android:textColor="#FFFFFF"  
    android:textSize="20sp"  
    android:textStyle="bold"  
    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="0.429" />
```

```
<TextView  
    android:id="@+id/textView9"  
    android:layout_width="136dp"  
    android:layout_height="39dp"  
    android:background="#009688"  
    android:text="Address"  
    android:textAlignment="center"  
    android:textColor="#FFFFFF"  
    android:textSize="20sp"  
    android:textStyle="bold"  
    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="0.352" />  
  
<TextView  
    android:id="@+id/textView5"  
    android:layout_width="413dp"  
    android:layout_height="67dp"  
    android:text=" Registered Successfully....."  
    android:textColor="#FA0202"  
    android:textSize="25sp"  
    android:textStyle="bold|italic"  
    app:layout_constraintBottom_toBottomOf="parent"  
    app:layout_constraintEnd_toEndOf="parent"  
    app:layout_constraintStart_toStartOf="parent"  
    app:layout_constraintTop_toTopOf="parent"  
    app:layout_constraintVertical_bias="0.066" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>
```

```
MainActivity.java package com.example.intentsharedpreferences;

import androidx.appcompat.app.AppCompatActivity;

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

public class MainActivity extends AppCompatActivity {

    String Name;
    String Address;
    String MobileNo;
    String Email;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
    public void onSubmit(View view){
        EditText name = (EditText) findViewById(R.id.name);
        EditText add = (EditText) findViewById(R.id.add);
        EditText mob = (EditText) findViewById(R.id.mob);
        EditText email = (EditText) findViewById(R.id.email);
        EditText pass = (EditText) findViewById(R.id.pass);
        Intent i = new
        Intent(getApplicationContext(),Reg_Details.class);
        Name= name.getText().toString();
        Address = add.getText().toString();
        MobileNo = mob.getText().toString();
        Email = email.getText().toString();
        SharedPreferences sharedpreferences =
        getSharedPreferences("MySharedPref",MODE_PRIVATE);
        SharedPreferences.Editor myEdit = sharedpreferences.edit();
        myEdit.putString("name", name.getText().toString());
        myEdit.putString("add", add.getText().toString());
        myEdit.putString("phone", mob.getText().toString());
        myEdit.putString("email", email.getText().toString());
        myEdit.apply();
        i.putExtra("Name",Name);
        i.putExtra("Address",Address);
        i.putExtra("Phone",MobileNo);
        i.putExtra("Email",Email);
        startActivity(i);
    }

    @Override
    protected void onResume() {
```

```

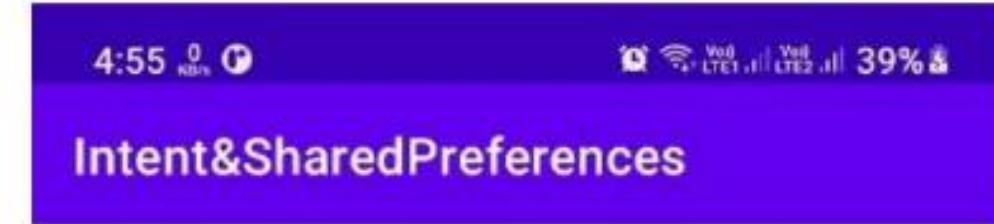
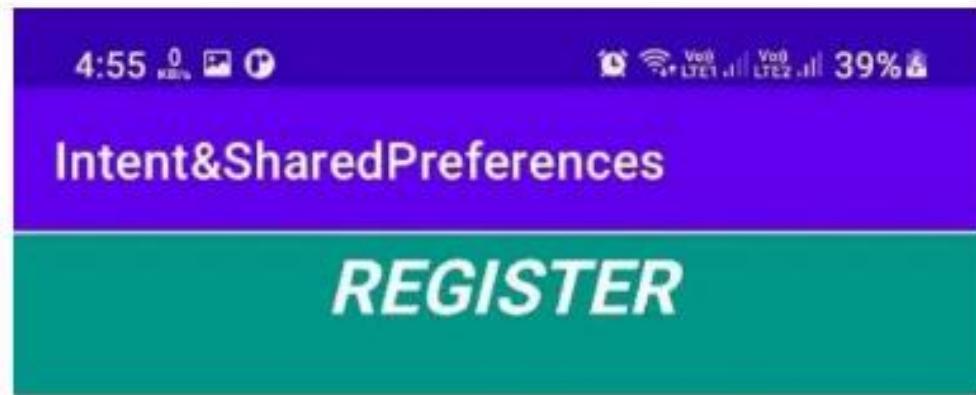
        super.onResume();
        EditText name = (EditText) findViewById(R.id.email);
        EditText add = (EditText) findViewById(R.id.add);
        EditText phone = (EditText) findViewById(R.id.mob);
        EditText email = (EditText) findViewById(R.id.email);
        SharedPreferences sh =
                getSharedPreferences("MySharedPref", MODE_PRIVATE);
        name.setText(sh.getString("name",""));
        add.setText(sh.getString("add",""));
        phone.setText(sh.getString("phone",""));
        email.setText(sh.getString("email",""));

    }
}

```

Reg_Details.java	<pre> package com.example.intentsharedpreferences; import androidx.appcompat.app.AppCompatActivity; import android.os.Bundle; import android.widget.TextView; public class Reg_Details extends AppCompatActivity { @Override protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity_reg_details); TextView name = (TextView) findViewById(R.id.name); TextView add = (TextView) findViewById(R.id.add); TextView mobile = (TextView) findViewById(R.id.mob); TextView email = (TextView) findViewById(R.id.email); Bundle extras = getIntent().getExtras(); String name2 = extras.getString("Name"); String add2 = extras.getString("Address"); String phone2 = extras.getString("Phone"); String email2 = extras.getString("Email"); name.setText(name2); add.setText(add2); mobile.setText(phone2); email.setText(email2); } } </pre>
-------------------------	---

OUTPUT:



Name	Arun
Address	kollam
Mobile No.	9612345678
Email	arun@gmail.com
Password

Name	Arun
Address	kollam
Mobile No.	9612345678
Email	arun@gmail.com

LOGIN

RESULT:

Program has been successfully executed and output is obtained.

PROGRAM 2

AIM:

Design a simple Calculator using GridLayout and Cascaded LinearLayout.

activity_main.xml

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

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:layout_row="0"
        android:layout_column="0"
        android:orientation="vertical">

        <EditText
            android:id="@+id/result"
            android:layout_width="384dp"
            android:layout_height="115dp"
            android:layout_row="0"
            android:layout_column="0"
            android:layout_marginTop="200dp"
            android:ems="10"
            android:inputType="textPersonName" />

        <Button
            android:id="@+id/bracket"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_row="0"
            android:layout_column="0"
            android:onClick="bracket"
            android:text="()" />

        <Button
            android:id="@+id/seven"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_row="0"
            android:layout_column="0"
            android:text="7" />
    
```

```
        android:onClick="seven"
        android:text="7" />

    <Button
        android:id="@+id/four"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_row="0"
        android:layout_column="0"
        android:onClick="four"
        android:text="4" />

    <Button
        android:id="@+id/one"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_row="0"
        android:layout_column="0"
        android:onClick="one"
        android:text="1" />

    <Button
        android:id="@+id/plusminus"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_row="0"
        android:layout_column="0"
        android:onClick="plusminus"
        android:text="+/-" />

</LinearLayout>

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:layout_row="0"
    android:layout_column="0"
    android:layout_marginTop="200dp"
    android:orientation="vertical">

    <Button
        android:id="@+id/percent"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_row="0"
        android:layout_column="0"
        android:layout_marginLeft="100dp"
        android:layout_marginTop="115dp"
        android:onClick="percent"
        android:text "%" />
```

```
<Button  
    android:id="@+id/eight"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_row="0"  
    android:layout_column="0"  
    android:layout_marginLeft="100dp"  
    android:onClick="eight"  
    android:text="8" />  
  
<Button  
    android:id="@+id/five"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_row="0"  
    android:layout_column="0"  
    android:layout_marginLeft="100dp"  
    android:onClick="five"  
    android:text="5" />  
  
<Button  
    android:id="@+id/two"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_row="0"  
    android:layout_column="0"  
    android:layout_marginLeft="100dp"  
    android:onClick="two"  
    android:text="2" />  
  
<Button  
    android:id="@+id/zero"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_row="0"  
    android:layout_column="0"  
    android:layout_marginLeft="100dp"  
    android:onClick="zero"  
    android:text="0" />  
  
</LinearLayout>  
<LinearLayout  
    android:layout_width="match_parent"  
    android:layout_height="match_parent"  
    android:layout_row="0"  
    android:layout_column="0"  
    android:layout_marginTop="200dp"  
    android:orientation="vertical">
```

```
<Button  
    android:id="@+id/equal"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_row="0"  
    android:layout_column="0"  
    android:layout_marginLeft="200dp"  
    android:layout_marginTop="115dp"  
    android:onClick="equal"  
    android:text="=" />  
  
<Button  
    android:id="@+id/nine"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_row="0"  
    android:layout_column="0"  
    android:layout_marginLeft="200dp"  
    android:onClick="nine"  
    android:text="9" />  
  
<Button  
    android:id="@+id/six"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_row="0"  
    android:layout_column="0"  
    android:layout_marginLeft="200dp"  
    android:onClick="six"  
    android:text="6" />  
  
<Button  
    android:id="@+id/three"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_row="0"  
    android:layout_column="0"  
    android:layout_marginLeft="200dp"  
    android:onClick="three"  
    android:text="3" />  
  
<Button  
    android:id="@+id/dot"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_row="0"  
    android:layout_column="0"  
    android:layout_marginLeft="200dp"  
    android:onClick="dot"  
    android:text"." />
```

```
</LinearLayout>

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:layout_row="0"
    android:layout_column="0"
    android:layout_marginTop="200dp"
    android:orientation="vertical">

    <Button
        android:id="@+id/clear"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_row="0"
        android:layout_column="0"
        android:layout_marginLeft="300dp"
        android:layout_marginTop="115dp"
        android:onClick="clear"
        android:text="AC" />

    <Button
        android:id="@+id/div"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_row="0"
        android:layout_column="0"
        android:layout_marginLeft="300dp"
        android:onClick="div"
        android:text="/" />

    <Button
        android:id="@+id/mul"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_row="0"
        android:layout_column="0"
        android:layout_marginLeft="300dp"
        android:onClick="mul"
        android:text="*" />

    <Button
        android:id="@+id/diff"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_row="0"
        android:layout_column="0"
        android:layout_marginLeft="300dp"
        android:onClick="sub"
```

```
        android:text="-" />

    <Button
        android:id="@+id/plus"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_row="0"
        android:layout_column="0"
        android:layout_marginLeft="300dp"
        android:onClick="add"
        android:text="+" />

    </LinearLayout>
</GridLayout>
```

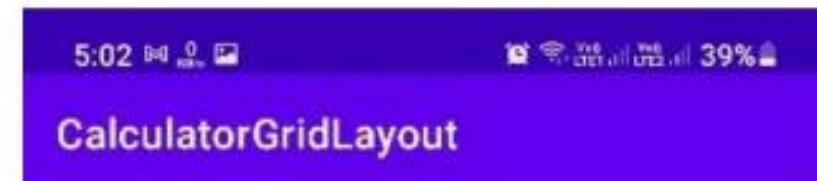
MainActivity.java	<pre>package com.example.calculatorgridlayout; import androidx.appcompat.app.AppCompatActivity; import android.os.Bundle; import android.view.View; import android.widget.EditText; public class MainActivity extends AppCompatActivity { EditText ans; String str,temp; float num1,num2,res; int flag=0; //Used for to identify Arithematic Operations int flag2=0; //Used for to identify +- int flag3=0; //Used for to identify brackets @Override protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity_main); ans=findViewById(R.id.result); } public void clear(View view) { ans.setText(""); } public void zero(View view) { str=ans.getText().toString(); ans.setText(str+"0"); } public void one(View view) { str=ans.getText().toString();</pre>
--------------------------	--

```
        ans.setText(str+"1");
    }
    public void two(View view)
    {
        str=ans.getText().toString();
        ans.setText(str+"2");
    }
    public void three(View view)
    {
        str=ans.getText().toString();
        ans.setText(str+"3");
    }
    public void four(View view)
    {
        str=ans.getText().toString();
        ans.setText(str+"4");
    }
    public void five(View view)
    {
        str=ans.getText().toString();
        ans.setText(str+"5");
    }
    public void six(View view)
    {
        str=ans.getText().toString();
        ans.setText(str+"6");
    }
    public void seven(View view)
    {
        str=ans.getText().toString();
        ans.setText(str+"7");
    }
    public void eight(View view)
    {
        str=ans.getText().toString();
        ans.setText(str+"8");
    }
    public void nine(View view)
    {
        str=ans.getText().toString();
        ans.setText(str+"9");
    }
    public void dot(View view)
    {
        str=ans.getText().toString();
        ans.setText(str+".");
    }
    public void add(View view)
    {
        num1=Float.parseFloat(ans.getText().toString());
```

```
        ans.setText("");
        flag=1;
    }
    public void sub(View view)
    {
        num1=Float.parseFloat(ans.getText().toString());
        ans.setText("");
        flag=2;
    }
    public void mul(View view)
    {
        num1=Float.parseFloat(ans.getText().toString());
        ans.setText("");
        flag=3;
    }
    public void div(View view)
    {
        num1=Float.parseFloat(ans.getText().toString());
        ans.setText("");
        flag=4;
    }
    public void plusminus(View view)
    {
        if(flag2==0)
        {
            temp= ans.getText().toString();
            temp=temp.replace("-","");
            flag2=1;
        }
        else
        {
            temp= ans.getText().toString();
            ans.setText("-"+temp);
            flag2=0;
        }
    }
    public void percent(View view)
    {
        Double no
        =Double.parseDouble(ans.getText().toString())/100;
        ans.setText(String.valueOf(no));
    }
    public void bracket(View view)
    {
        if(flag3==0)
        {
            temp= ans.getText().toString();
            temp=temp.replace(",","");
            temp=temp.replace(")","");
            flag3=1;
        }
    }
}
```

```
        }
    else
    {
        temp= ans.getText().toString();
        ans.setText("(" +temp+ ")");
        flag3=0;
    }
}
public void equal(View view)
{
    num2=Float.parseFloat(ans.getText().toString());
    switch(flag)
    {
        case 1: res=num1+num2;
        ans.setText(String.valueOf(res));
        break;
        case 2: res=num1-num2;
        ans.setText(String.valueOf(res));
        break;
        case 3: res=num1*num2;
        ans.setText(String.valueOf(res));
        break;
        case 4: res=num1/num2;
        ans.setText(String.valueOf(res));
        break;
    }
}
```

OUTPUT:



4.0



RESULT:

Program has been successfully executed and output is obtained.

PROGRAM 3

AIM:

Create a Facebook page using RelativeLayout; set properties using xml file.

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"
        android:layout_alignParentLeft="false"
        tools:context=".MainActivity">

    <RelativeLayout
        android:layout_width="414dp"
        android:layout_height="727dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        tools:layout_editor_absoluteX="-2dp">

        <ImageView
            android:id="@+id/imageView3"
            android:layout_width="377dp"
            android:layout_height="178dp"
            android:layout_centerHorizontal="true"
            app:srcCompat="@drawable/fb" />

        <ImageView
            android:id="@+id/imageView5"
            android:layout_width="190dp"
            android:layout_height="142dp"
            android:layout_below="@+id/imageView3"
            android:layout_alignParentLeft="false"
            app:srcCompat="@drawable/batman" />

        <TextView
            android:id="@+id/textView"
            android:layout_width="217dp"
            android:layout_height="wrap_content"
            android:layout_alignLeft="@+id/imageView5"
            android:layout_alignRight="@+id/imageView3"
            android:layout_alignBottom="@+id/imageView5"
            android:layout_alignParentBottom="false"
            android:layout_marginLeft="195dp"
```

```
        android:layout_marginRight="3dp"
        android:layout_marginBottom="64dp"
        android:text="I m BatMan "
        android:textAlignment="center"
        android:textColor="#FAF6F6"
        android:textSize="28sp"
        android:textStyle="bold|italic" />

<CheckBox
    android:id="@+id/checkBox2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/imageView5"
    android:layout_marginTop="17dp"
    android:text="LogIn"
    android:textSize="25sp" />

<CheckBox
    android:id="@+id/checkBox3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/checkBox2"
    android:layout_marginTop="21dp"
    android:text="Log In To Another Account"
    android:textSize="25sp" />

<TextView
    android:id="@+id/textView2"
    android:layout_width="243dp"
    android:layout_height="45dp"
    android:layout_below="@+id/checkBox3"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="68dp"
    android:background="#009688"
    android:text="Create New Account"
    android:textAlignment="center"
    android:textSize="25sp" />

</RelativeLayout>

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

MainActivity.java	package com.example.relativelayout; import androidx.appcompat.app.AppCompatActivity; import android.os.Bundle; public class MainActivity extends AppCompatActivity { @Override protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity_main); } }
--------------------------	--

OUTPUT:



RESULT:

Program has been successfully executed and output is obtained.

PROGRAM 4

AIM:

Develop an application that toggles image using FrameLayout.

activity_main.xml

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

    <ImageView
        android:id="@+id/imageView"
        android:layout_width="414dp"
        android:layout_height="351dp"
        android:layout_gravity="center"
        android:baselineAlignBottom="false"
        app:srcCompat="@drawable/pic1" />

    <ImageView
        android:id="@+id/imageView2"
        android:layout_width="400dp"
        android:layout_height="400dp"
        android:layout_gravity="center"
        android:visibility="gone"
        app:srcCompat="@drawable/pic2" />

</FrameLayout>
```

```
MainActivity.java package com.example.frameLayout;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.ImageView;

public class MainActivity extends AppCompatActivity implements
View.OnClickListener {

    ImageView i1,i2;

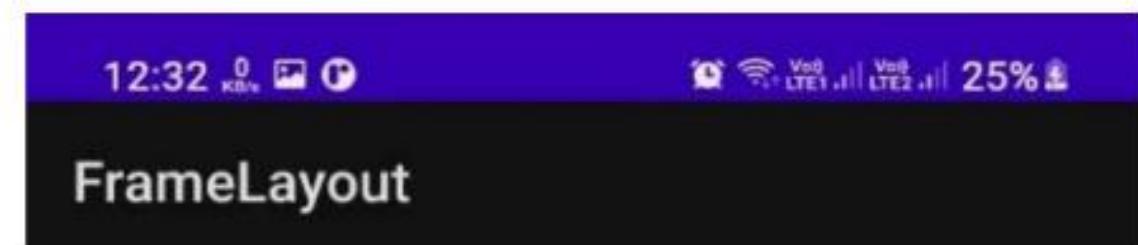
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        i1=findViewById(R.id.imageView);
        i2=findViewById(R.id.imageView2);

        i1.setOnClickListener(this);
        i2.setOnClickListener(this);
    }

    @Override
    public void onClick(View v) {
        if(v.getId()==R.id.imageView){
            i1.setVisibility(v.GONE);
            i2.setVisibility(v.VISIBLE);
        }
        else{
            i1.setVisibility(v.VISIBLE);
            i2.setVisibility(v.GONE);
        }
    }

    @Override
    public void onPointerCaptureChanged(boolean hasCapture) {
    }
}
```

OUTPUT:



RESULT:

Program has been successfully executed and output is obtained.