**COURSE OUTCOME 2**

**PROGRAM NO:1**

**AIM:**Design a registration activity and store registration details in local memory of phone using Intents and SharedPreferences

**PROGRAM CODE:**

**XML CODE:**

activity\_main.xml

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

<LinearLayoutxmlns: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="#00BCD4"

android:orientation="vertical"

tools:context=".MainActivity">

<EditText

android:id="@+id/name"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:backgroundTint="#00BCD4"

android:ems="10"

android:hint="Name"

android:inputType="textPersonName" />

<EditText

android:id="@+id/address"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:backgroundTint="#00BCD4"

android:ems="10"

android:hint="Address"

android:inputType="textPersonName"

android:minHeight="48dp" />

<EditText

android:id="@+id/email"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:backgroundTint="#00BCD4"

android:ems="10"

android:hint="Email"

android:inputType="textEmailAddress" />

<EditText

android:id="@+id/password"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:backgroundTint="#00BCD4"

android:ems="10"

android:hint="Password"

android:inputType="textPassword" />

<EditText

android:id="@+id/phno"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:backgroundTint="#00BCD4"

android:ems="10"

android:hint="Phone"

android:inputType="phone" />

<TextView

android:id="@+id/textView"

android:layout\_width="match\_parent"

android:layout\_height="35dp"

android:backgroundTint="#00BCD4"

android:text="Gender"

android:textAppearance="@style/TextAppearance.AppCompat.Body2"

android:textSize="16sp" />

<RadioGroup

android:id="@+id/gender"

android:layout\_width="match\_parent"

android:layout\_height="99dp">

<RadioButton

android:id="@+id/male"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:backgroundTint="#00BCD4"

android:text="Male" />

<RadioButton

android:id="@+id/female"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:backgroundTint="#00BCD4"

android:text="Female" />

<Button

android:id="@+id/validate"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="SUBMIT" />

</RadioGroup>

<Button

android:id="@+id/validate1"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:backgroundTint="#009688"

android:text="SUBMIT"

android:textSize="20sp" />

</LinearLayout>

activity\_main2.xml

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

<androidx.constraintlayout.widget.ConstraintLayoutxmlns: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">

<TextView

android:id="@+id/textView2"

android:layout\_width="165dp"

android:layout\_height="44dp"

android:layout\_marginStart="8dp"

android:layout\_marginTop="8dp"

android:layout\_marginEnd="8dp"

android:text="HAII WELCOME......!!!!!"

android:textColor="#B388FF"

android:textSize="16sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.454"

app:layout\_constraintLeft\_toLeftOf="parent"

app:layout\_constraintRight\_toRightOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.06" />

<TextView

android:id="@+id/textView3"

android:layout\_width="149dp"

android:layout\_height="52dp"

android:backgroundTint="#8C9EFF"

android:text="TextView"

android:textColor="#06D8F3"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.461"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.229" />

<TextView

android:id="@+id/textView4"

android:layout\_width="147dp"

android:layout\_height="52dp"

android:text="TextView"

android:textColor="#D310F4"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.465"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.369" />

<TextView

android:id="@+id/textView5"

android:layout\_width="146dp"

android:layout\_height="50dp"

android:text="TextView"

android:textColor="#F80D5D"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.467"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.499" />

</androidx.constraintlayout.widget.ConstraintLayout>

**JAVA CODE:**

MainActivity.java

package com.example.sharedpreference;

import androidx.appcompat.app.AppCompatActivity;

import android.content.SharedPreferences;

import android.content.Intent;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.RadioButton;

import android.widget.RadioGroup;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

EditText e1,e2,e3,e4,e5;

Button b1;

RadioButton r1,r2;

RadioGroup r;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

e1=(EditText)findViewById(R.id.name);

e2=(EditText)findViewById(R.id.address);

e3=(EditText)findViewById(R.id.email);

e4=(EditText)findViewById(R.id.password);

e5=(EditText)findViewById(R.id.phno);

b1=(Button)findViewById(R.id.validate1);

r=(RadioGroup)findViewById(R.id.gender);

r1=(RadioButton)findViewById(R.id.male);

r2=(RadioButton)findViewById(R.id.female);

b1.setOnClickListener(new View.OnClickListener(){

@Override

public void onClick(View v)

{

validate();

}

});

}

protected void onResume() {

super.onResume();

SharedPreferencessh = getSharedPreferences("MySharedPref", MODE\_PRIVATE);

String s1 = sh.getString("name", "name");

String s2 = sh.getString("address", "address");

String s3 = sh.getString("pno","pno");

e1.setText(s1);

e2.setText(s2);

e3.setText(s3);

}

protected void onPause() {

super.onPause();

SharedPreferencessharedPreferences = getSharedPreferences("MySharedPref", MODE\_PRIVATE);

SharedPreferences.EditormyEdit = sharedPreferences.edit();

myEdit.putString("name", e1.getText().toString());

myEdit.putString("address",e2.getText().toString());

myEdit.putString("pno",e3.getText().toString());

myEdit.apply();

}

public void validate()

{

String name=e1.getText().toString();

String email=e3.getText().toString().trim();

String address=e2.getText().toString();

String password=e4.getText().toString();

String namePattern="[0-9!@#$%^&\*]";

String emailPattern="[a-zA-Z0-9.\_-]+@[a-z]+\\.+[a-z]+";

String pno=e5.getText().toString();

int valid=1;

if(name.length()==0)

{

e1.getText().clear();

e1.requestFocus();

e1.setError("Enter name ");

Toast.makeText(getApplicationContext(), "Enter valid name", Toast.LENGTH\_SHORT).show();

valid++;

}

if(name.matches(".\*[0-9].\*"))

{ e1.getText().clear();

e1.requestFocus();

e1.setError("Name contains illegal characters");

Toast.makeText(getApplicationContext(), "Enter valid name", Toast.LENGTH\_SHORT).show();

valid++;

}

if(address.length()==0)

{

e2.getText().clear();

e2.requestFocus();

e2.setError("Enter address");

Toast.makeText(getApplicationContext(), "Enter valid address", Toast.LENGTH\_SHORT).show();

valid++;

}

if(email.length()==0)

{

e3.getText().clear();

e3.requestFocus();

e3.setError("Enter email address");

Toast.makeText(getApplicationContext(), "Enter valid email", Toast.LENGTH\_SHORT).show();

valid++;

}

if(!email.matches(emailPattern))

{

e3.getText().clear();

e3.requestFocus();

e3.setError("Invalid email address");

Toast.makeText(getApplicationContext(), "Enter valid email ", Toast.LENGTH\_SHORT).show();

valid++;

}

if(password.length()==0)

{

e4.requestFocus();

e4.setError("Enter password");

valid++;

}

if(password.length()<5)

{

e4.requestFocus();

e4.setError("Enter an 8 digit password");

valid++;

}

if(!password.equals("password"))

{

Toast.makeText(getApplicationContext(), "Incorrect password", Toast.LENGTH\_SHORT).show();

}

if (r.getCheckedRadioButtonId() == -1)

{

Toast.makeText(getApplicationContext(), "Please select any gender", Toast.LENGTH\_SHORT).show();

valid++;

}

else

{

if(r1.isChecked())

{

Toast.makeText(getApplicationContext(), "Welcome Mr."+name, Toast.LENGTH\_SHORT).show();

}

if(r2.isChecked())

{

Toast.makeText(getApplicationContext(), "Welcome Ms."+name, Toast.LENGTH\_SHORT).show();

}

}

if(pno.length()<10)

{

e5.setError("Phone number should be of atleast 10 digits");

valid++;

}

if(valid==1)

{

Toast.makeText(getApplicationContext(), "VALIDATION SUCESSFULL", Toast.LENGTH\_SHORT).show();

Intent i = new Intent(getApplicationContext(), MainActivity2.class);

i.putExtra("1", name);

i.putExtra("2", email);

i.putExtra("3", address);

startActivity(i);

}

}

}

MainActivity2.java

package com.example.sharedpreference;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.content.Intent;

import android.widget.TextView;

import android.view.View;

import android.widget.Toast;

public class MainActivity2 extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

TextView t1,t2,t3;

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main2);

Bundle extras = getIntent().getExtras();

t1=(TextView) findViewById(R.id.textView3);

t2=(TextView) findViewById(R.id.textView4);

t3=(TextView) findViewById(R.id.textView5);

String value1 = extras.getString("1");

String value2 = extras.getString("2");

String value3 = extras.getString("3");

t1.setText(value1);

t2.setText("Address is "+ value3);

t3.setText("Email is "+ value2);

}

public void callFirstActivity(View view){

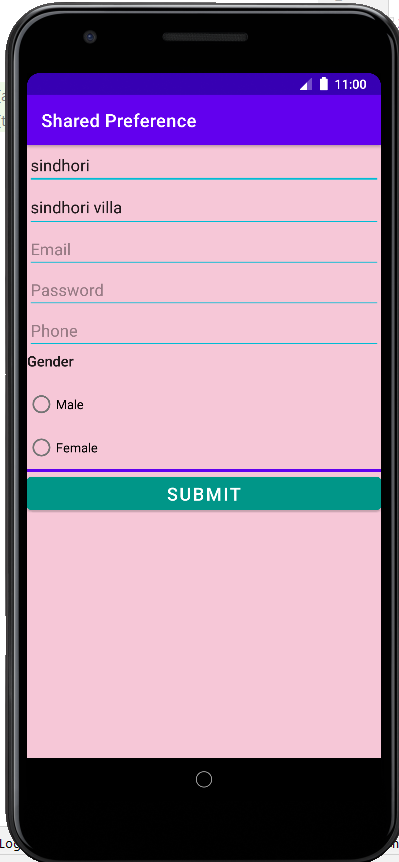
Intent i = new Intent(getApplicationContext(), MainActivity.class);

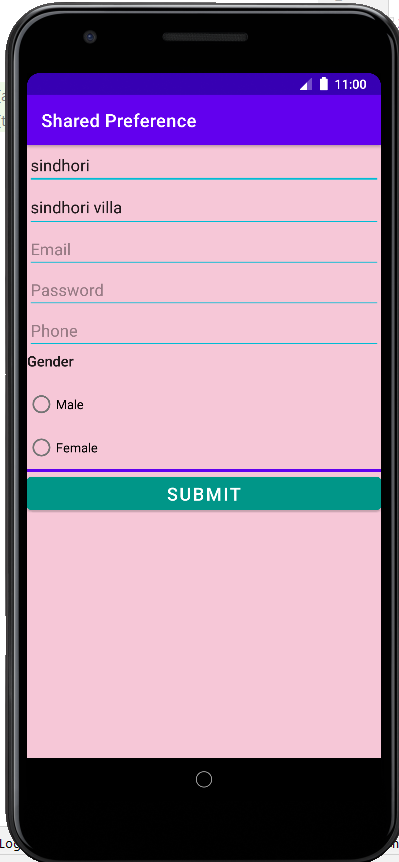
startActivity(i);

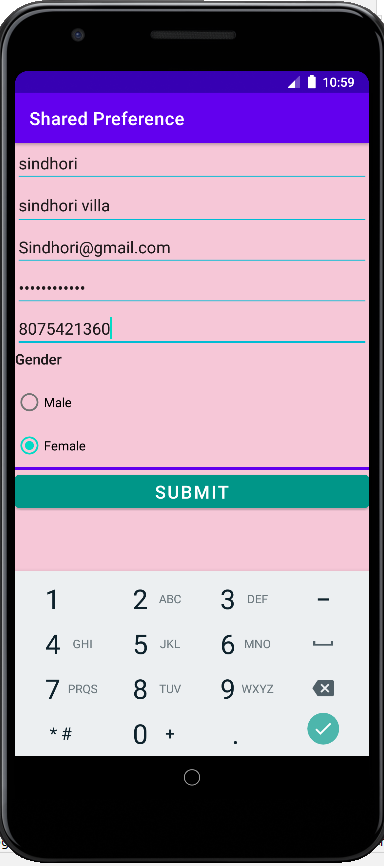
}

}

**OUTPUT**

****

****

****

**RESULT:** The program executed successfully and output is obtained

**PROGRAM NO:2**

**AIM:**Design a simple Calculator using GridLayout and Cascaded LinearLayout

**PROGRAM CODE:**

**XML CODE:**

<?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="#F6CACA"

tools:context=".MainActivity">

<android.widget.GridLayout

android:id="@+id/gridLayout"

android:layout\_width="398dp"

android:layout\_height="496dp"

android:layout\_marginStart="1dp"

android:layout\_marginTop="45dp"

android:layout\_marginEnd="1dp"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/edt1">

<Button

android:id="@+id/button2"

android:layout\_width="100dp"

android:layout\_height="60dp"

android:text="C"

android:textSize="20sp"

app:layout\_column="0"

app:layout\_row="0" />

<Button

android:id="@+id/button3"

android:layout\_width="98dp"

android:layout\_height="60dp"

android:text="( )"

android:textSize="20sp"

app:layout\_column="1"

app:layout\_row="0" />

<Button

android:id="@+id/button4"

android:layout\_width="wrap\_content"

android:layout\_height="60dp"

android:text="%"

android:textSize="20sp"

app:layout\_column="2"

app:layout\_row="0" />

<Button

android:id="@+id/button5"

android:layout\_width="121dp"

android:layout\_height="64dp"

android:layout\_row="0"

android:layout\_column="3"

android:text="/"

android:textSize="20sp"

app:layout\_column="3"

app:layout\_row="0" />

<Button

android:id="@+id/button6"

android:layout\_width="91dp"

android:layout\_height="59dp"

android:layout\_row="1"

android:layout\_column="0"

android:text="7"

android:textSize="20sp"

app:layout\_column="0"

app:layout\_row="1" />

<Button

android:id="@+id/button7"

android:layout\_width="wrap\_content"

android:layout\_height="60dp"

android:layout\_row="2"

android:layout\_column="1"

android:text="4"

android:textSize="20sp"

app:layout\_column="0"

app:layout\_row="2" />

<Button

android:id="@+id/button8"

android:layout\_width="wrap\_content"

android:layout\_height="61dp"

android:layout\_row="1"

android:layout\_column="2"

android:text="1"

android:textSize="20sp"

app:layout\_column="0"

app:layout\_row="3" />

<Button

android:id="@+id/button9"

android:layout\_width="123dp"

android:layout\_height="65dp"

android:text="+/-"

android:textSize="20sp"

app:layout\_column="0"

app:layout\_row="4" />

<Button

android:id="@+id/button10"

android:layout\_width="wrap\_content"

android:layout\_height="61dp"

android:layout\_row="4"

android:layout\_column="0"

android:text="8"

android:textSize="20sp"

app:layout\_column="1"

app:layout\_row="1" />

<Button

android:id="@+id/button11"

android:layout\_width="wrap\_content"

android:layout\_height="59dp"

android:layout\_row="4"

android:layout\_column="1"

android:text="9"

android:textSize="20sp"

app:layout\_column="2"

app:layout\_row="1" />

<Button

android:id="@+id/button12"

android:layout\_width="113dp"

android:layout\_height="62dp"

android:layout\_row="2"

android:layout\_column="3"

android:text="\*"

android:textSize="20sp"

app:layout\_column="3"

app:layout\_row="1" />

<Button

android:id="@+id/button13"

android:layout\_width="wrap\_content"

android:layout\_height="61dp"

android:layout\_row="1"

android:layout\_column="1"

android:text="5"

android:textSize="20sp"

app:layout\_column="1"

app:layout\_row="2" />

<Button

android:id="@+id/button14"

android:layout\_width="wrap\_content"

android:layout\_height="64dp"

android:layout\_row="2"

android:layout\_column="2"

android:text="2"

android:textSize="20sp"

app:layout\_column="1"

app:layout\_row="3" />

<Button

android:id="@+id/button15"

android:layout\_width="wrap\_content"

android:layout\_height="60dp"

android:layout\_row="3"

android:layout\_column="2"

android:text="0"

android:textSize="20sp"

app:layout\_column="1"

app:layout\_row="4" />

<Button

android:id="@+id/button16"

android:layout\_width="wrap\_content"

android:layout\_height="60dp"

android:layout\_row="2"

android:layout\_column="0"

android:text="6"

android:textSize="20sp"

app:layout\_column="2"

app:layout\_row="2" />

<Button

android:id="@+id/button17"

android:layout\_width="wrap\_content"

android:layout\_height="61dp"

android:layout\_row="3"

android:layout\_column="0"

android:text="-"

android:textSize="20sp"

app:layout\_column="3"

app:layout\_row="2" />

<Button

android:id="@+id/button18"

android:layout\_width="wrap\_content"

android:layout\_height="59dp"

android:text="3"

android:textSize="20sp"

app:layout\_column="2"

app:layout\_row="3" />

<Button

android:id="@+id/button19"

android:layout\_width="wrap\_content"

android:layout\_height="61dp"

android:layout\_row="4"

android:layout\_column="2"

android:text="."

android:textSize="24sp"

app:layout\_column="2"

app:layout\_row="4" />

<Button

android:id="@+id/button20"

android:layout\_width="121dp"

android:layout\_height="59dp"

android:layout\_row="3"

android:layout\_column="3"

android:text="+"

android:textSize="20sp"

app:layout\_column="3"

app:layout\_row="3" />

<Button

android:id="@+id/button21"

android:layout\_width="111dp"

android:layout\_height="62dp"

android:layout\_row="4"

android:layout\_column="3"

android:text="="

android:textSize="20sp"

app:layout\_column="3"

app:layout\_row="4" />

</android.widget.GridLayout>

<EditText

android:id="@+id/edt1"

android:layout\_width="423dp"

android:layout\_height="93dp"

android:layout\_marginTop="140dp"

android:layout\_marginBottom="95dp"

android:background="#A3D4DA"

android:backgroundTint="#CCEBEF"

android:textSize="34sp"

app:layout\_constraintBottom\_toTopOf="@+id/gridLayout"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.0"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="1.0"

tools:ignore="MissingConstraints" />

<EditText

android:id="@+id/editTextTextPersonName2"

android:layout\_width="406dp"

android:layout\_height="61dp"

android:layout\_marginStart="1dp"

android:layout\_marginTop="15dp"

android:layout\_marginBottom="42dp"

android:background="#F6C7D7"

android:ems="10"

android:foregroundGravity="center"

android:gravity="center"

android:inputType="textPersonName"

android:text="Calculator"

android:textColor="#673AB7"

android:textSize="50sp"

android:textStyle="bold"

app:layout\_constraintBottom\_toTopOf="@+id/edt1"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

android:layout\_marginLeft="1dp" />

</androidx.constraintlayout.widget.ConstraintLayout>

**JAVA CODE:**

package com.example.calcgridlayout;

import android.os.Bundle;

import androidx.appcompat.app.AppCompatActivity;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

public class MainActivity extends AppCompatActivity {

Button button0, button1, button2, button3, button4, button5,

button6,

button7, button8, button9, buttonAdd, buttonSub,

buttonDivision,

buttonMul, buttond, buttonC, buttonEqual,buttonperc;

EditTextcEditText;

float mValueOne, mValueTwo;

booleancAddition, mSubtract, cMultiplication, cDivision,cperc;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

button0 = (Button) findViewById(R.id.button15);

button1 = (Button) findViewById(R.id.button8);

button2 = (Button) findViewById(R.id.button14);

button3 = (Button) findViewById(R.id.button18);

button4 = (Button) findViewById(R.id.button7);

button5 = (Button) findViewById(R.id.button13);

button6 = (Button) findViewById(R.id.button16);

button7 = (Button) findViewById(R.id.button6);

button8 = (Button) findViewById(R.id.button10);

button9 = (Button) findViewById(R.id.button11);

buttond = (Button) findViewById(R.id.button19);

buttonAdd = (Button) findViewById(R.id.button20);

buttonSub = (Button) findViewById(R.id.button17);

buttonMul = (Button) findViewById(R.id.button12);

buttonDivision = (Button) findViewById(R.id.button5);

buttonC = (Button) findViewById(R.id.button2);

buttonperc = (Button) findViewById(R.id.button4);

buttonEqual = (Button) findViewById(R.id.button21);

cEditText = (EditText) findViewById(R.id.edt1);

button1.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

cEditText.setText(cEditText.getText() + "1");

}

});

button2.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

cEditText.setText(cEditText.getText() + "2");

}

});

button3.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

cEditText.setText(cEditText.getText() + "3");

}

});

button4.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

cEditText.setText(cEditText.getText() + "4");

}

});

button5.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

cEditText.setText(cEditText.getText() + "5");

}

});

button6.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

cEditText.setText(cEditText.getText() + "6");

}

});

button7.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

cEditText.setText(cEditText.getText() + "7");

}

});

button8.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

cEditText.setText(cEditText.getText() + "8");

}

});

button9.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

cEditText.setText(cEditText.getText() + "9");

}

});

button0.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

cEditText.setText(cEditText.getText() + "0");

}

});

buttonAdd.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

if (cEditText == null) {

cEditText.setText("");

} else {

mValueOne = Float.parseFloat(cEditText.getText() +

"");

cAddition = true;

cEditText.setText(null);

}

}

});

buttonSub.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

mValueOne = Float.parseFloat(cEditText.getText() +

"");

mSubtract = true;

cEditText.setText(null);

}

});

buttonMul.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

mValueOne = Float.parseFloat(cEditText.getText() +

"");

cMultiplication = true;

cEditText.setText(null);

}

});

buttonDivision.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

mValueOne = Float.parseFloat(cEditText.getText() +

"");

cDivision = true;

cEditText.setText(null);

}

});

buttonperc.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

mValueOne = Float.parseFloat(cEditText.getText() +

"");

cperc = true;

cEditText.setText(null);

}

});

buttonEqual.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

mValueTwo = Float.parseFloat(cEditText.getText() +

"");

if (cAddition == true) {

cEditText.setText(mValueOne + mValueTwo + "");

cAddition = false;

}

if (mSubtract == true) {

cEditText.setText(mValueOne - mValueTwo + "");

mSubtract = false;

}

if (cMultiplication == true) {

cEditText.setText(mValueOne \* mValueTwo + "");

cMultiplication = false;

}

if (cDivision == true) {

cEditText.setText(mValueOne / mValueTwo + "");

cDivision = false;

}

if (cperc == true) {

cEditText.setText((mValueOne / mValueTwo)\*100 +

"");

cperc = false;

}

}

});

buttonC.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

cEditText.setText("");

}

});

buttond.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

cEditText.setText(cEditText.getText() + ".");

}

});

}

}

**OUTPUT**



****

****

**RESULT:** The program executed successfully and output is obtained

**PROGRAM NO:3**

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

**PROGRAM CODE:**

**XML CODE:**

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

<RelativeLayoutxmlns: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">

<ImageView

android:id="@+id/imageView3"

android:layout\_width="309dp"

android:layout\_height="130dp"

android:layout\_centerHorizontal="true"

app:srcCompat="@drawable/fb" />

<ImageView

android:id="@+id/imageView7"

android:layout\_width="110dp"

android:layout\_height="500dp"

android:layout\_below="@+id/imageView3"

android:layout\_alignParentLeft="false"

android:layout\_marginTop="-200dp"

app:srcCompat="@drawable/image" />

<TextView

android:id="@+id/editText1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignLeft="@id/imageView7"

android:layout\_alignBottom="@id/imageView7"

android:layout\_alignParentBottom="false"

android:layout\_marginLeft="149dp"

android:layout\_marginBottom="233dp"

android:layout\_toRightOf="@id/imageView7"

android:ems="10"

android:fontFamily="sans-serif-black"

android:inputType="textPersonName"

android:text="Christy Raj"

android:textSize="20dp" />

<CheckBox

android:id="@+id/check1"

android:layout\_width="217dp"

android:layout\_height="26dp"

android:layout\_below="@id/imageView7"

android:layout\_marginTop="63dp"

android:layout\_marginBottom="56dp"

android:text="Log In" />

<CheckBox

android:layout\_width="217dp"

android:layout\_height="26dp"

android:layout\_alignTop="@+id/check1"

android:layout\_marginTop="60dp"

android:layout\_marginBottom="56dp"

android:text="Find your Account" />

<EditText

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentBottom="true"

android:layout\_centerInParent="true"

android:layout\_centerVertical="true"

android:layout\_marginBottom="72dp"

android:background="@color/design\_default\_color\_primary\_variant"

android:text="Create New Account"

android:textColor="@color/white"

android:textSize="20dp" />

</RelativeLayout>

**JAVA CODE:**

package com.example.relativelayout;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

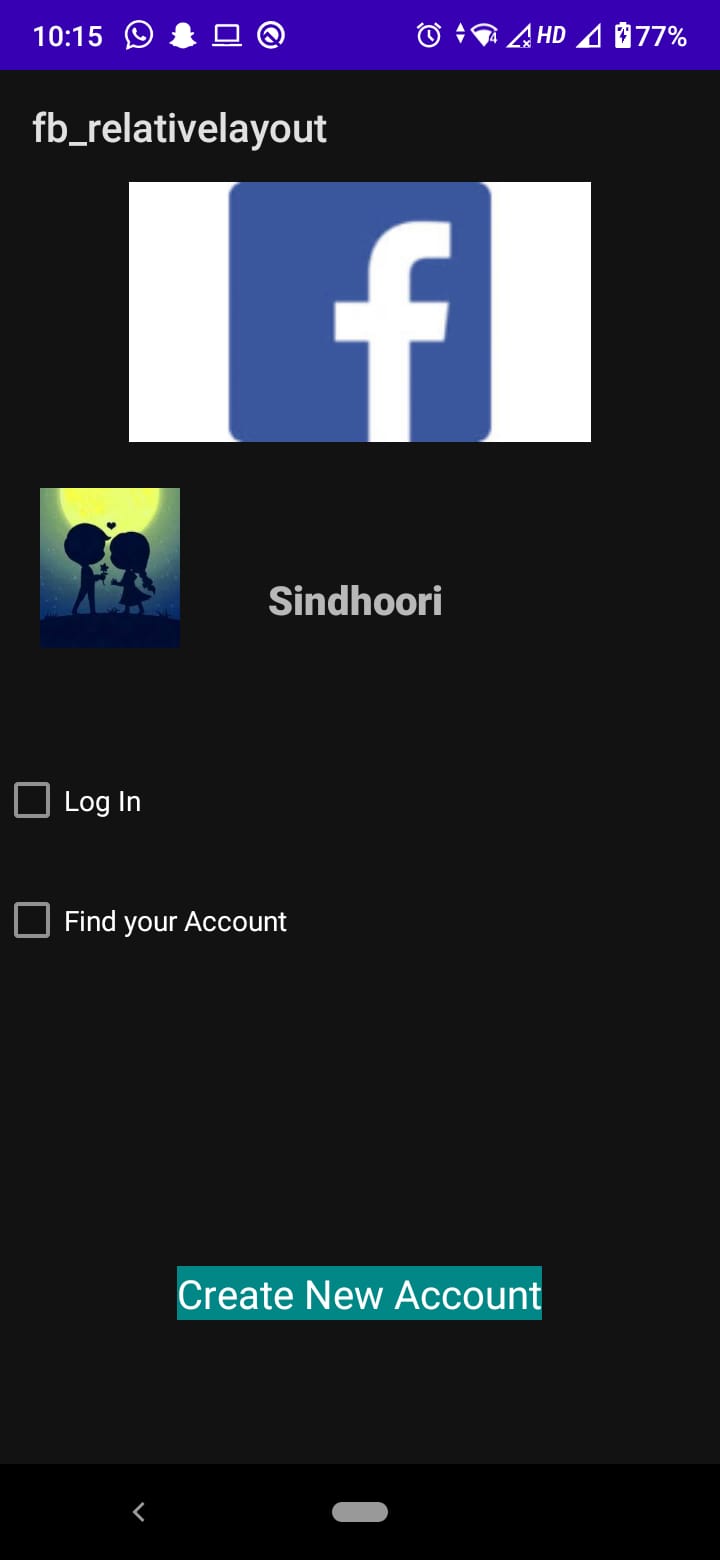
super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

}

}

**OUTPUT**

****

**RESULT:** The program executed successfully and output is obtained

**PROGRAM NO:4**

**AIM:**Develop an application that toggles image using FrameLayout

**PROGRAM CODE:**

**XML CODE:**

<FrameLayoutxmlns:android="http://schemas.android.com/apk/res/android"

android:orientation="vertical"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent">

<ImageView

android:id="@+id/first\_image"

android:src = "@drawable/first"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:scaleType="fitXY" />

<ImageView

android:id="@+id/second\_image"

android:src = "@drawable/scnd"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:scaleType="fitXY" />

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Click the image to switch"

android:layout\_gravity="center\_horizontal|bottom"

android:padding="5dip"

android:textColor="#ffffff"

android:textStyle="bold"

android:background="#333333"

android:layout\_marginBottom="10dip" />

</FrameLayout>

**JAVA CODE:**

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 {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

final ImageViewfirst\_image = (ImageView)this.findViewById(R.id.first\_image);

final ImageViewsecond\_image = (ImageView)this.findViewById(R.id.second\_image);

first\_image.setOnClickListener(new View.OnClickListener(){

public void onClick(View view) {

second\_image.setVisibility(View.VISIBLE);

view.setVisibility(View.GONE);

}

});

second\_image.setOnClickListener(new View.OnClickListener(){

public void onClick(View view) {

first\_image.setVisibility(View.VISIBLE);

view.setVisibility(View.GONE);

}

});

}

}

**OUTPUT**

****



**RESULT:** The program executed successfully and output is obtained