**PROGRAM 1:**

**Write a program to change text on button click**

**Code :**

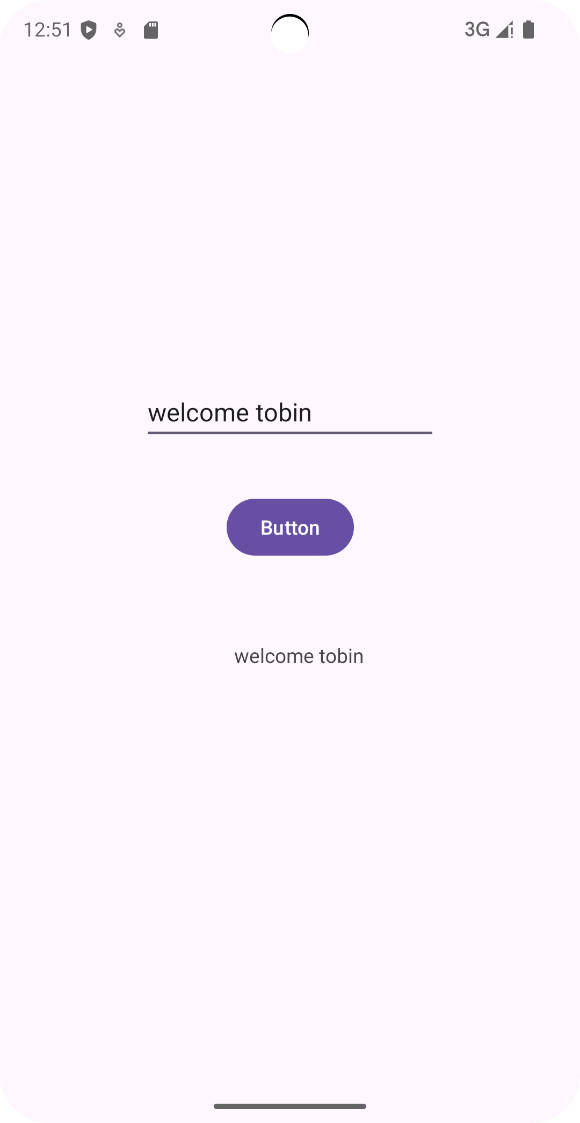
**activity\_main.xml:**

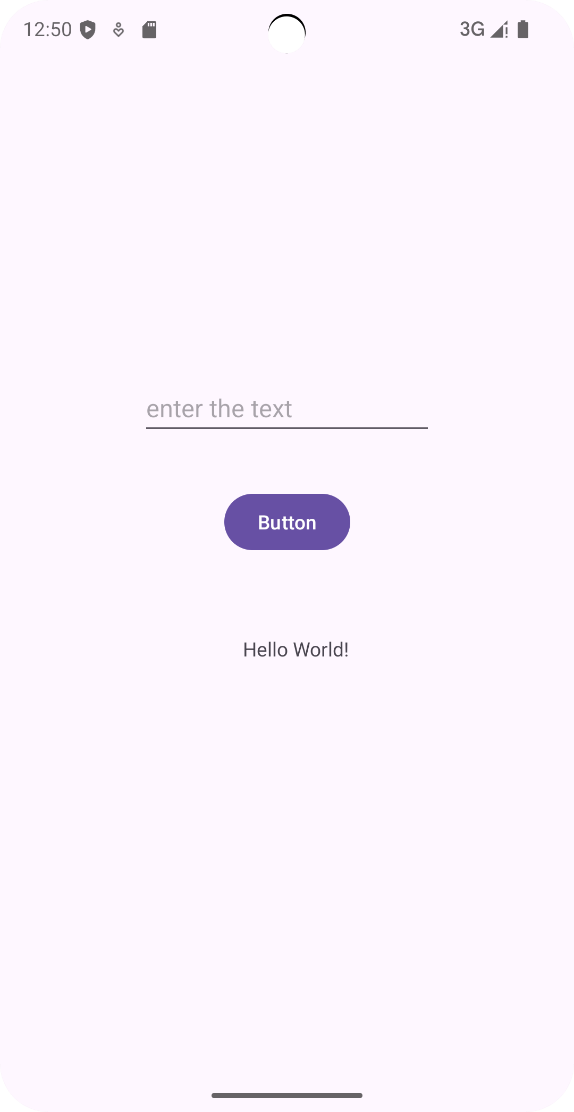
<?xml version="1.0" encoding="utf-8"?>  
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:id="@+id/main"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <TextView  
 android:id="@+id/t1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginTop="20dp"  
 android:layout\_marginEnd="50dp"  
 android:text="Hello World!"  
 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/button"  
 app:layout\_constraintVertical\_bias="0.11" />  
  
 <EditText  
 android:id="@+id/e1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginTop="228dp"  
 android:layout\_marginEnd="50dp"  
 android:ems="10"  
 android:hint="enter the text"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginTop="35dp"  
 android:layout\_marginEnd="50dp"  
 android:onClick="view"  
 android:text="Button"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/e1" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**MainActivity.java:**

package com.example.toastmessage;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.EditText;  
import android.widget.TextView;  
  
import androidx.activity.EdgeToEdge;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.core.graphics.Insets;  
import androidx.core.view.ViewCompat;  
import androidx.core.view.WindowInsetsCompat;  
  
public class MainActivity extends AppCompatActivity {  
 private EditText t1;  
 private TextView tv;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 EdgeToEdge.*enable*(this);  
 setContentView(R.layout.*activity\_main*);  
 ViewCompat.*setOnApplyWindowInsetsListener*(findViewById(R.id.*main*), (v, insets) -> {  
 Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.*systemBars*());  
 v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);  
 return insets;  
 });  
 t1 = findViewById(R.id.*e1*);  
 tv = findViewById(R.id.*t1*);  
 }  
  
 public void view(View view) {  
 tv.setText(t1.getText().toString());  
 }  
}

**Output :**





welcome sreyas

welcome sreyas

**PROGRAM 2:**

**Write a program to toast text on button click**

**Code :**

**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:id="@+id/main"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity">

<Button

android:id="@+id/button"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="20dp"

android:layout\_marginTop="28dp"

android:layout\_marginEnd="20dp"

android:text="click here"

android:onClick="click"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

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

<EditText

android:id="@+id/editTextText"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="20dp"

android:layout\_marginTop="205dp"

android:layout\_marginEnd="20dp"

android:ems="10"

android:hint="Enter text"

android:inputType="text"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>

**MainActivity.java:**

package com.example.toast;

import android.os.Bundle;

import android.view.View;

import android.widget.EditText;

import android.widget.Toast;

import androidx.activity.EdgeToEdge;

import androidx.appcompat.app.AppCompatActivity;

import androidx.core.graphics.Insets;

import androidx.core.view.ViewCompat;

import androidx.core.view.WindowInsetsCompat;

public class MainActivity extends AppCompatActivity {

private EditText t1;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

EdgeToEdge.enable(this);

setContentView(R.layout.activity\_main);

ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {

Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());

v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);

return insets;

});

t1 = findViewById(R.id.editTextText);

}

public void click(View view) {

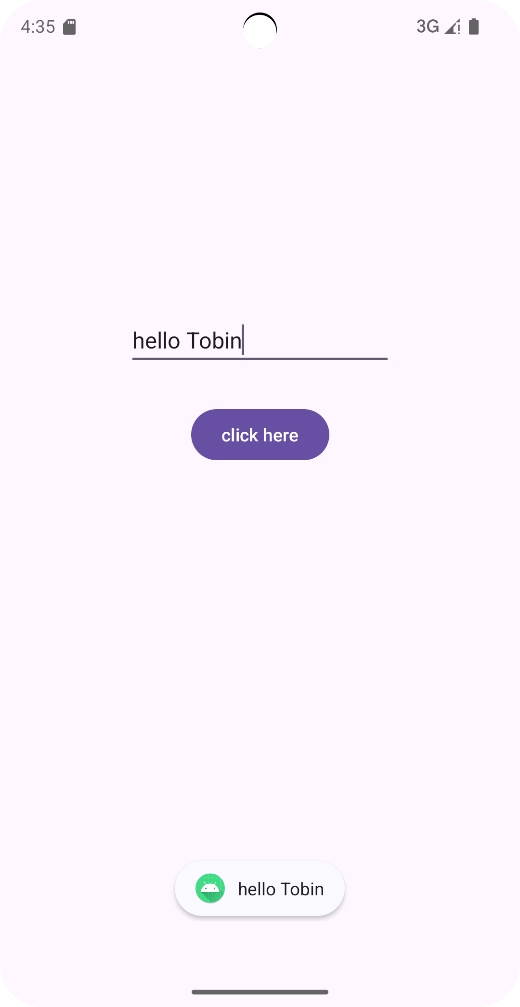
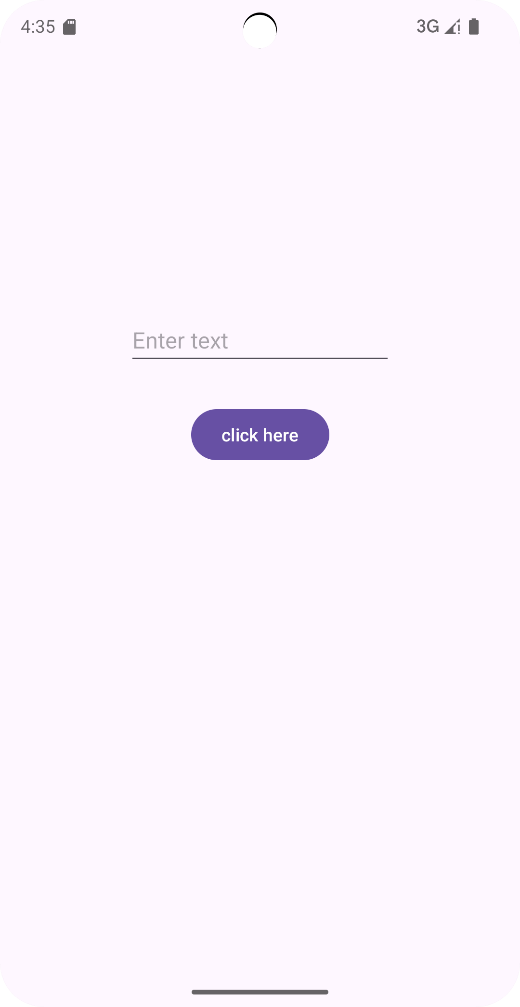
String s1=t1.getText().toString();

Toast.makeText(this, s1, Toast.LENGTH\_SHORT).show();

}

}

**Output :**



hello Sreyas

hello Sreyas

**PROGRAM 3:**

**Write a program to change background color on button click**

**Code :**

**activity\_main.xml:**

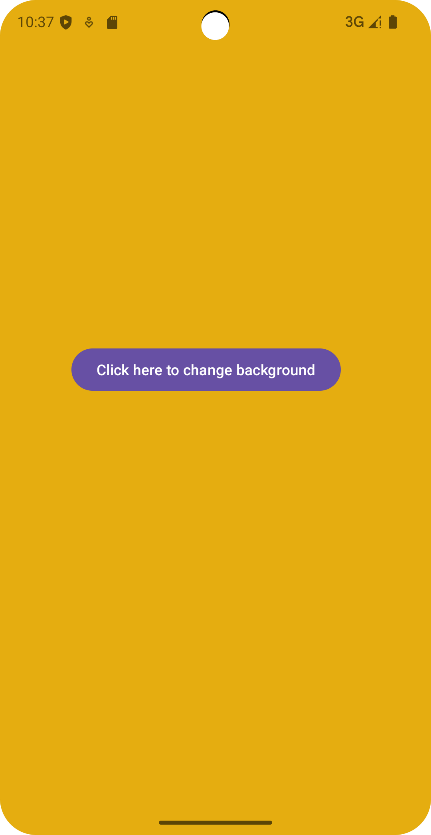
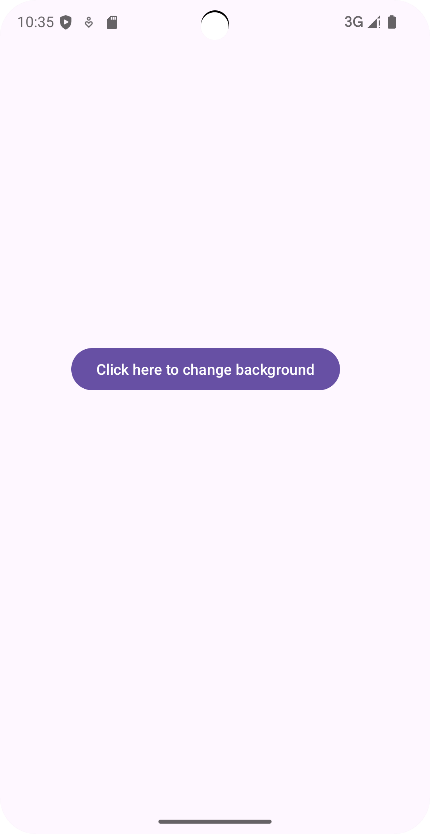
<?xml version="1.0" encoding="utf-8"?>  
<androidx.constraintlayout.widget.ConstraintLayout

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:id="@+id/main"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="151dp"  
 android:layout\_marginTop="287dp"  
 android:layout\_marginEnd="169dp"  
 android:text="Click here to change background"  
 android:onClick="colorchange"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
</androidx.constraintlayout.widget.ConstraintLayout>

**MainActivity.java:**

package com.example.randomcolor;  
  
import android.graphics.Color;  
import android.os.Bundle;  
import android.view.View;  
  
import androidx.activity.EdgeToEdge;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.constraintlayout.widget.ConstraintLayout;  
import androidx.core.graphics.Insets;  
import androidx.core.view.ViewCompat;  
import androidx.core.view.WindowInsetsCompat;  
  
import java.util.Random;  
  
public class MainActivity extends AppCompatActivity {  
  
  
 private ConstraintLayout b1;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 EdgeToEdge.*enable*(this);  
 setContentView(R.layout.*activity\_main*);  
 ViewCompat.*setOnApplyWindowInsetsListener*(findViewById(R.id.*main*), (v, insets) -> {  
 Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.*systemBars*());  
 v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);  
 return insets;  
 });  
 // Initialize the ConstraintLayout  
 b1 = findViewById(R.id.*main*);  
 }  
  
 public void colorchange(View view) {  
 Random random = new Random();  
 int red = random.nextInt(256); // Use 256 to include 255  
 int green = random.nextInt(256); // Use 256 to include 255  
 int blue = random.nextInt(256); // Use 256 to include 255  
 b1.setBackgroundColor(Color.*rgb*(red, green, blue));  
 }  
}

**Output :**



**PROGRAM 4:**

**Design a Login Form with username and password using Constraint Layout and toast valid credentials**

**Code :**

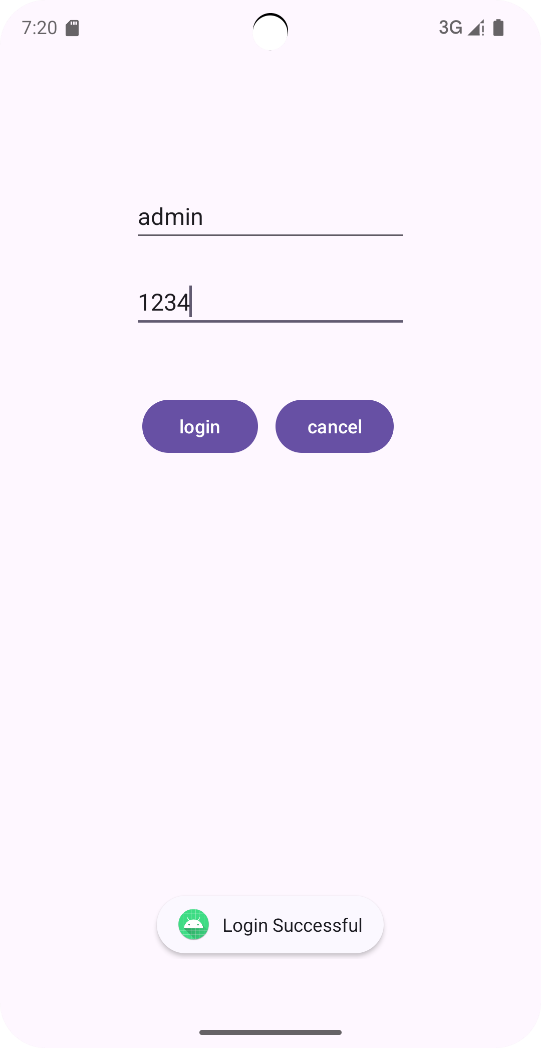
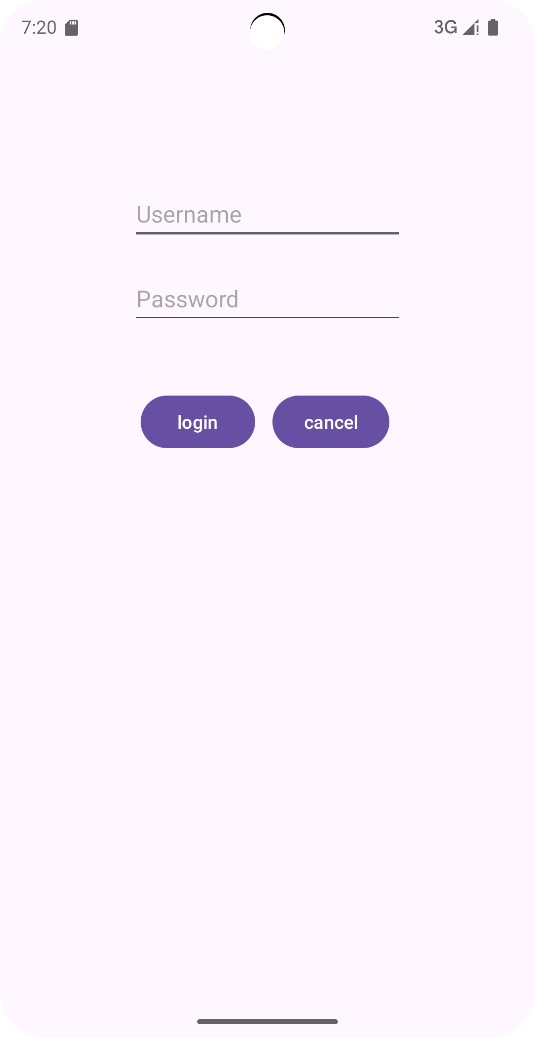
**activity\_main.xml:**

<?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:id="@+id/main"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <EditText  
 android:id="@+id/ed1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="20dp"  
 android:layout\_marginTop="100dp"  
 android:layout\_marginEnd="20dp"  
 android:ems="10"  
 android:hint="Username"  
 android:inputType="text"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <EditText  
 android:id="@+id/ed2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="20dp"  
 android:layout\_marginTop="20dp"  
 android:layout\_marginEnd="20dp"  
 android:ems="10"  
 android:hint="Password"  
 android:inputType="text"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/ed1" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="108dp"  
 android:layout\_marginTop="48dp"  
 android:text="login"  
 android:onClick="login"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/ed2" />  
  
 <Button  
 android:id="@+id/button2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="48dp"  
 android:layout\_marginEnd="112dp"  
 android:text="cancel"  
 android:onClick="cancel"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/ed2" />  
   
</androidx.constraintlayout.widget.ConstraintLayout>

**MainActivity.java:**

package com.example.login;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.EditText;  
import android.widget.TextView;  
import android.widget.Toast;  
  
import androidx.activity.EdgeToEdge;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.core.graphics.Insets;  
import androidx.core.view.ViewCompat;  
import androidx.core.view.WindowInsetsCompat;  
  
public class MainActivity extends AppCompatActivity {  
 private EditText o1;  
 private EditText o2;  
 private TextView v1;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 EdgeToEdge.*enable*(this);  
 setContentView(R.layout.*activity\_main*);  
 ViewCompat.*setOnApplyWindowInsetsListener*(findViewById(R.id.*main*), (v, insets) -> {  
 Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.*systemBars*());  
 v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);  
 return insets;  
 });  
 o1 = findViewById(R.id.*ed1*);  
 o2 = findViewById(R.id.*ed2*);  
 }  
  
 public void login(View view) {  
 String username = o1.getText().toString();  
 String password = o2.getText().toString();  
 if (isValidCredentials(username, password)) {  
 Toast.*makeText*(this, "Login Successful", Toast.*LENGTH\_SHORT*).show();  
 } else {  
 Toast.*makeText*(this, "Invalid credentials", Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
  
 public void cancel(View view) {  
 o1.setText("");  
 o2.setText("");  
 }  
  
 private boolean isValidCredentials(String username, String password) {  
 return username.equals("admin") && password.equals("1234");  
 }  
}

**Output :**



**PROGRAM 5:**

**Write a program that demonstrates Activity Lifecycle.**

**Code :**

**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:id="@+id/main"

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="Hello World!"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>

**MainActivity.java:**

package com.example.activity;

import android.os.Bundle;

import android.util.Log;

import android.widget.Toast;

import androidx.activity.EdgeToEdge;

import androidx.appcompat.app.AppCompatActivity;

import androidx.core.graphics.Insets;

import androidx.core.view.ViewCompat;

import androidx.core.view.WindowInsetsCompat;

public class MainActivity extends AppCompatActivity {

private static final String TAG = "LifecycleExample";

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

EdgeToEdge.enable(this);

setContentView(R.layout.activity\_main);

ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {

Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());

v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);

return insets;

});

Log.d(TAG,"On create called");

Toast.makeText(this, "Activity Created", Toast.LENGTH\_SHORT).show();

}

@Override

protected void onStart() {

super.onStart();

Log.d(TAG, "onStart called");

Toast.makeText(this, "Activity Started", Toast.LENGTH\_SHORT).show();

}

@Override

protected void onResume() {

super.onResume();

Log.d(TAG, "onResume called");

Toast.makeText(this, "Activity Resumed", Toast.LENGTH\_SHORT).show();

}

@Override

protected void onPause() {

super.onPause();

Log.d(TAG, "onPause called");

Toast.makeText(this, "Activity Paused", Toast.LENGTH\_SHORT).show();

}

@Override

protected void onStop() {

super.onStop();

Log.d(TAG, "onStop called");

Toast.makeText(this, "Activity Stopped", Toast.LENGTH\_SHORT).show();

}

@Override

protected void onRestart() {

super.onRestart();

Log.d(TAG, "onRestart called");

Toast.makeText(this, "Activity Restarted", Toast.LENGTH\_SHORT).show();

}

@Override

protected void onDestroy() {

super.onDestroy();

Log.d(TAG, "onDestroy called");

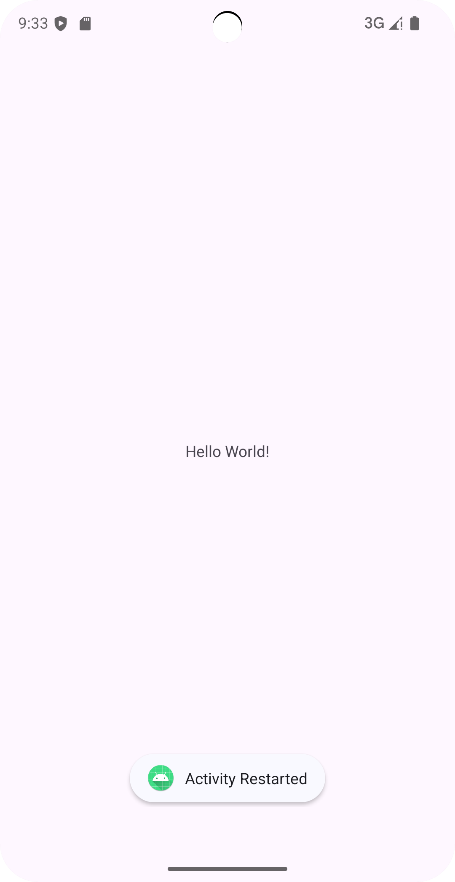
Toast.makeText(this, "Activity Destroyed", Toast.LENGTH\_SHORT).show();

}

}

**Output :**







**PROGRAM 6:**

**Implementing basic arithmetic operations of a simple calculator**

**Code :**

**activity\_main.xml:**

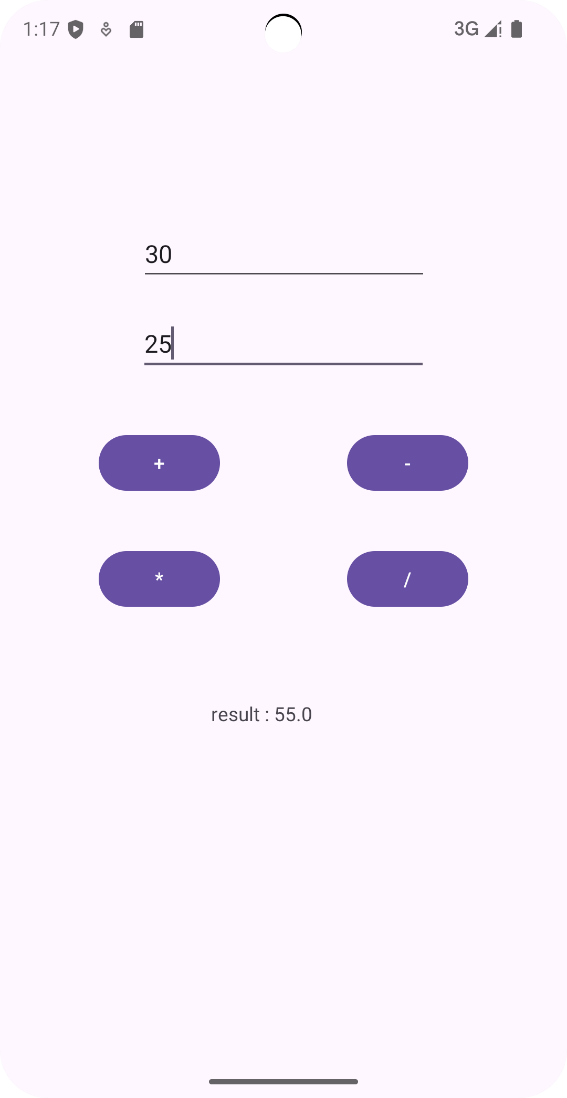
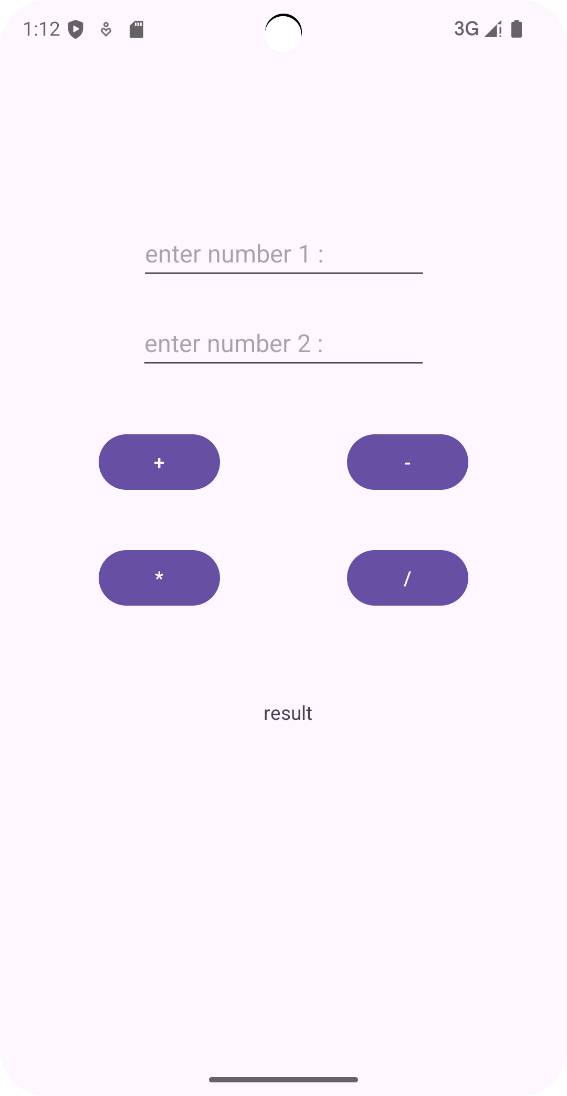
<?xml version="1.0" encoding="utf-8"?>  
 <androidx.constraintlayout.widget.ConstraintLayout

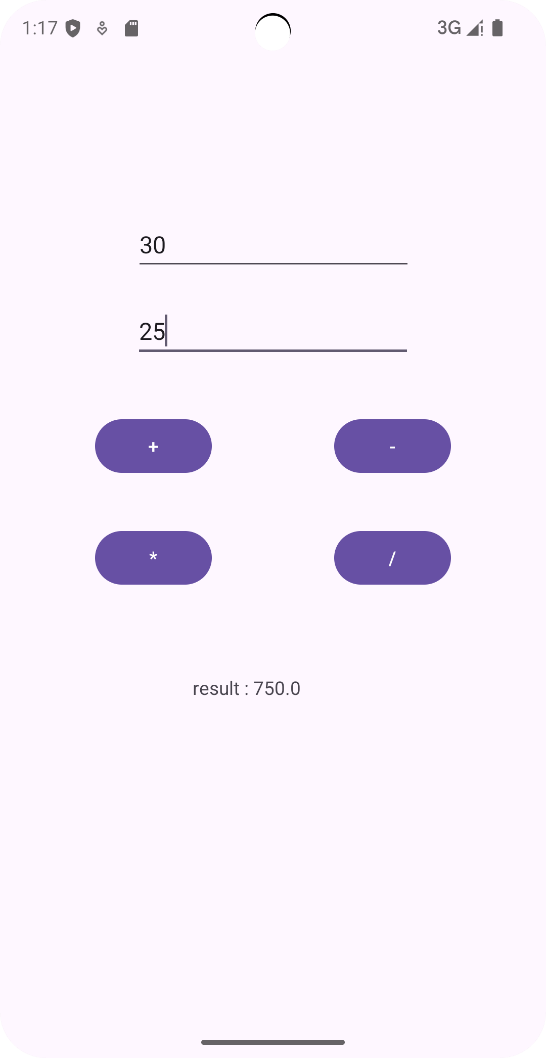
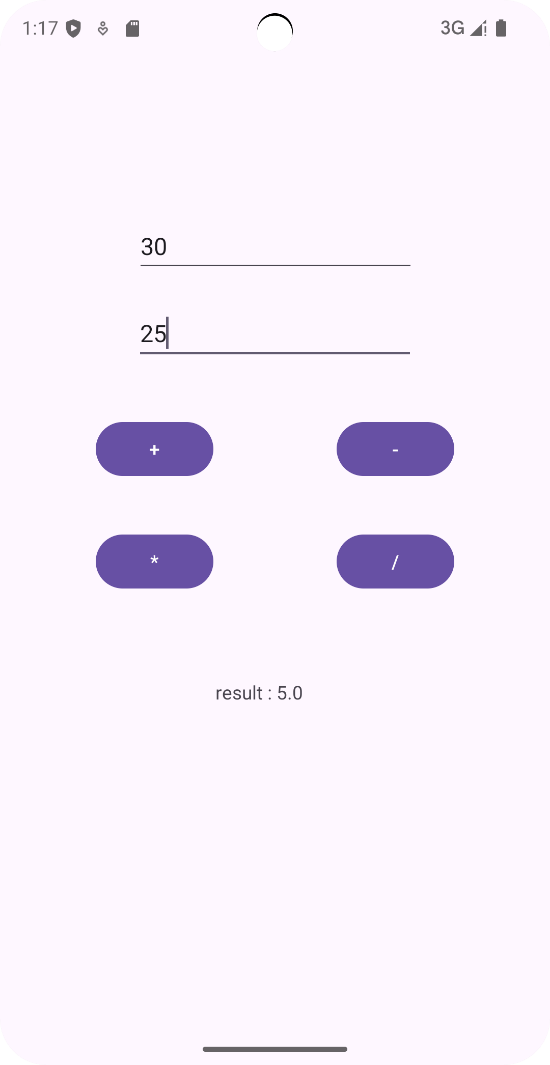
xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:id="@+id/main"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <TextView  
 android:id="@+id/t1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="25dp"  
 android:layout\_marginTop="236dp"  
 android:layout\_marginEnd="25dp"  
 android:text="result"  
 app:layout\_constraintEnd\_toStartOf="@+id/button2"  
 app:layout\_constraintHorizontal\_bias="1.0"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/e2" />  
  
 <EditText  
 android:id="@+id/e1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginTop="120dp"  
 android:layout\_marginEnd="50dp"  
 android:ems="10"  
 android:hint="enter number 1 :"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.504"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <EditText  
 android:id="@+id/e2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginTop="20dp"  
 android:layout\_marginEnd="50dp"  
 android:ems="10"  
 android:hint="enter number 2 :"  
 android:inputType="text"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/e1" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="20dp"  
 android:layout\_marginTop="40dp"  
 android:layout\_marginEnd="20dp"  
 android:text="+"  
 android:onClick="add"  
 app:layout\_constraintEnd\_toStartOf="@+id/button2"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/e2" />  
  
 <Button  
 android:id="@+id/button2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="20dp"  
 android:layout\_marginTop="40dp"  
 android:layout\_marginEnd="20dp"  
 android:text="-"  
 android:onClick="substract"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toEndOf="@+id/button"  
 app:layout\_constraintTop\_toBottomOf="@+id/e2" />  
  
 <Button  
 android:id="@+id/button3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="20dp"  
 android:layout\_marginTop="36dp"  
 android:layout\_marginEnd="20dp"  
 android:text="\*"  
 android:onClick="multiply"  
 app:layout\_constraintEnd\_toStartOf="@+id/button4"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/button" />  
  
 <Button  
 android:id="@+id/button4"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="20dp"  
 android:layout\_marginTop="36dp"  
 android:layout\_marginEnd="20dp"  
 android:text="/"  
 android:onClick="divison"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toEndOf="@+id/button3"  
 app:layout\_constraintTop\_toBottomOf="@+id/button2" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

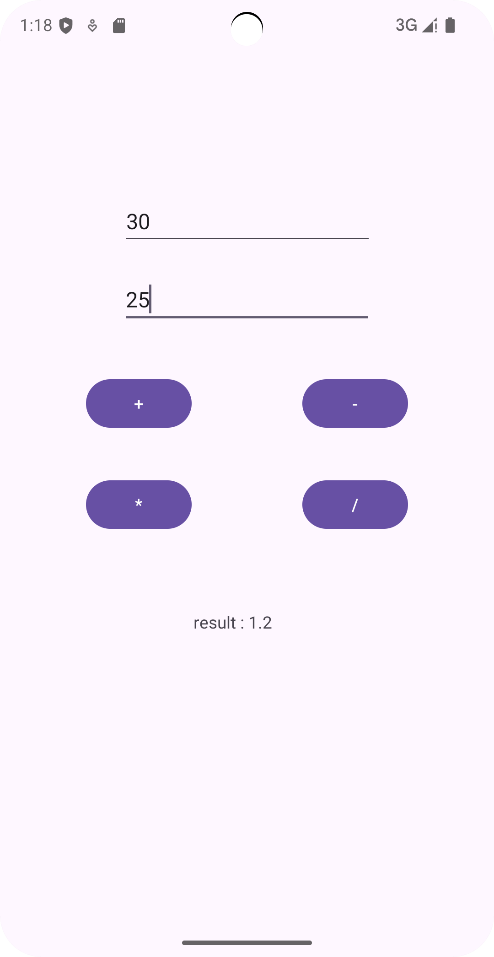
**MainActivity.java:**

package com.example.calculator;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.EditText;  
import android.widget.TextView;  
  
import androidx.activity.EdgeToEdge;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.core.graphics.Insets;  
import androidx.core.view.ViewCompat;  
import androidx.core.view.WindowInsetsCompat;  
  
public class MainActivity extends AppCompatActivity {  
 private EditText o1;  
 private EditText o2;  
 private TextView tv;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 EdgeToEdge.*enable*(this);  
 setContentView(R.layout.*activity\_main*);  
 ViewCompat.*setOnApplyWindowInsetsListener*(findViewById(R.id.*main*), (v, insets) -> {  
 Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.*systemBars*());  
 v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);  
 return insets;  
 });  
 o1 = findViewById(R.id.*e1*);  
 o2 = findViewById(R.id.*e2*);  
 tv = findViewById(R.id.*t1*);  
 }  
  
 public void add(View view) {  
 String s1 = o1.getText().toString();  
 String s2 = o2.getText().toString();  
 float num1 = Float.*parseFloat*(s1);  
 float num2 = Float.*parseFloat*(s2);  
 float sum = num1 + num2;  
 tv.setText("result : "+Float.*toString*(sum));  
 }  
  
 public void substract(View view) {  
 String s1 = o1.getText().toString();  
 String s2 = o2.getText().toString();  
 float num1 = Float.*parseFloat*(s1);  
 float num2 = Float.*parseFloat*(s2);  
 float sub = num1 - num2;  
 tv.setText("result : "+Float.*toString*(sub));  
 }  
  
 public void multiply(View view) {  
 String s1 = o1.getText().toString();  
 String s2 = o2.getText().toString();  
 float num1 = Float.*parseFloat*(s1);  
 float num2 = Float.*parseFloat*(s2);  
 float mul = num1 \* num2;  
 tv.setText("result : "+Float.*toString*(mul));  
 }  
  
 public void divison(View view) {  
 String s1 = o1.getText().toString();  
 String s2 = o2.getText().toString();  
 float num1 = Float.*parseFloat*(s1);  
 float num2 = Float.*parseFloat*(s2);  
  
 if (num2 != 0) {  
 float div = num1 / num2;  
 tv.setText("result : "+Float.*toString*(div));  
 } else {  
 tv.setText("Cannot divide by zero");  
 }  
 }  
}

**Output :**







**PROGRAM 7:**

**Implement Intent to navigate between multiple pages**

**Code :**

**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:id="@+id/main"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <EditText  
 android:id="@+id/ed1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="20dp"  
 android:layout\_marginTop="100dp"  
 android:layout\_marginEnd="20dp"  
 android:ems="10"  
 android:hint="Username"  
 android:inputType="text"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <EditText  
 android:id="@+id/ed2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="20dp"  
 android:layout\_marginTop="20dp"  
 android:layout\_marginEnd="20dp"  
 android:ems="10"  
 android:hint="Password"  
 android:inputType="text"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/ed1" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="108dp"  
 android:layout\_marginTop="48dp"  
 android:text="login"  
 android:onClick="login"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/ed2" />  
  
 <Button  
 android:id="@+id/button2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="48dp"  
 android:layout\_marginEnd="112dp"  
 android:text="cancel"  
 android:onClick="cancel"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/ed2" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**MainActivity.java:**

package com.example.login;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.EditText;  
import android.widget.TextView;  
import android.widget.Toast;  
  
import androidx.activity.EdgeToEdge;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.core.graphics.Insets;  
import androidx.core.view.ViewCompat;  
import androidx.core.view.WindowInsetsCompat;  
  
public class MainActivity extends AppCompatActivity {  
 private EditText o1;  
 private EditText o2;  
 private TextView v1;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 EdgeToEdge.*enable*(this);  
 setContentView(R.layout.*activity\_main*);  
 ViewCompat.*setOnApplyWindowInsetsListener*(findViewById(R.id.*main*), (v, insets) -> {  
 Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.*systemBars*());  
 v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);  
 return insets;  
 });  
 o1 = findViewById(R.id.*ed1*);  
 o2 = findViewById(R.id.*ed2*);  
 }  
  
 public void login(View view) {  
 String username = o1.getText().toString();  
 String password = o2.getText().toString();  
 if (isValidCredentials(username, password)) {  
 Toast.*makeText*(this, "Login Successful", Toast.*LENGTH\_SHORT*).show();  
 Intent intent = new Intent(MainActivity.this,MainActivity2.class);  
 intent.putExtra("USERNAME", username);  
 startActivity(intent);  
 } else {  
 Toast.*makeText*(this, "Invalid credentials", Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
  
 public void cancel(View view) {  
 o1.setText("");  
 o2.setText("");  
 }  
  
 private boolean isValidCredentials(String username, String password) {  
 return username.equals("admin") && password.equals("1234");  
 }  
}

**activity\_main2.xml:**

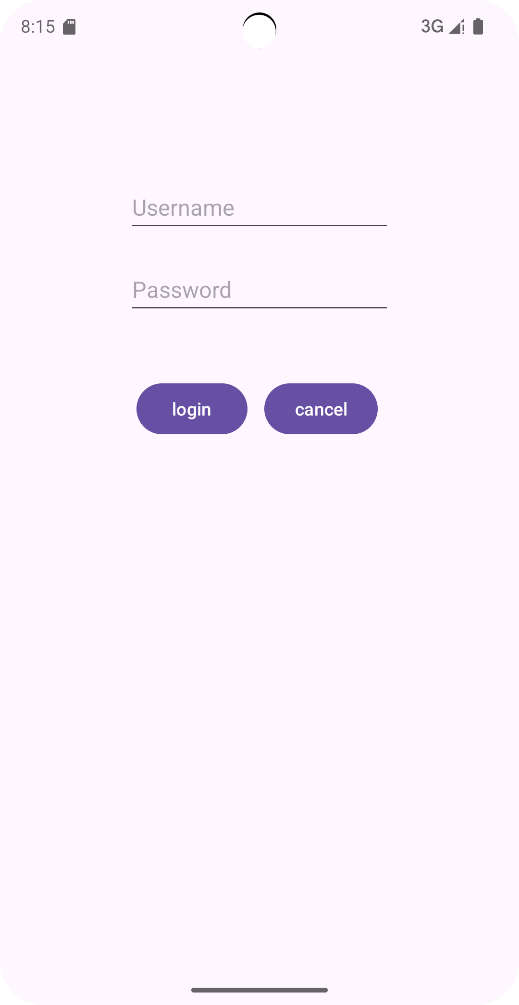
<?xml version="1.0" encoding="utf-8"?>  
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:id="@+id/main"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity2">  
  
 <TextView  
 android:id="@+id/e3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="79dp"  
 android:layout\_marginTop="80dp"  
 android:text="TextView"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <Button  
 android:id="@+id/b3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="80dp"  
 android:layout\_marginEnd="86dp"  
 android:onClick="logout"  
 android:text="logout"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
</androidx.constraintlayout.widget.ConstraintLayout>

**MainActivity2.java:**

package com.example.login;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.TextView;  
  
import androidx.activity.EdgeToEdge;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.core.graphics.Insets;  
import androidx.core.view.ViewCompat;  
import androidx.core.view.WindowInsetsCompat;  
  
public class MainActivity2 extends AppCompatActivity {  
private TextView usernameDisplay;  
private Button logoutButton;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 EdgeToEdge.*enable*(this);  
 setContentView(R.layout.*activity\_main2*);  
 ViewCompat.*setOnApplyWindowInsetsListener*(findViewById(R.id.*main*), (v, insets) -> {  
 Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.*systemBars*());  
 v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);  
 return insets;  
 });  
 Intent intent = getIntent();  
 String username = intent.getStringExtra("USERNAME");  
 usernameDisplay = findViewById(R.id.*e3*);  
 usernameDisplay.setText(username);  
  
 // Set up the logout button  
 logoutButton = findViewById(R.id.*b3*);  
 logoutButton.setOnClickListener(this::logout);  
 }  
  
 public void logout(View view) {  
 Intent intent = new Intent(MainActivity2.this, MainActivity.class);  
 // Optional: Clear activity stack to ensure MainActivity is at the top  
 intent.setFlags(Intent.*FLAG\_ACTIVITY\_NEW\_TASK* |

Intent.*FLAG\_ACTIVITY\_CLEAR\_TASK*);  
 startActivity(intent);  
 finish();  
 }  
}

**Output :**



**PROGRAM 8:**

**Design a registration activity and store registration details in local memory of phone using Intents and Shared Preferences**

**Code :**

**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:id="@+id/main"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity">

<EditText

android:id="@+id/e1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="10dp"

android:layout\_marginTop="84dp"

android:layout\_marginEnd="10dp"

android:ems="10"

android:hint="enter first name"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toEndOf="@+id/t1"

app:layout\_constraintTop\_toTopOf="parent" />

<TextView

android:id="@+id/t2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="10dp"

android:layout\_marginTop="20dp"

android:layout\_marginEnd="10dp"

android:text="last name :"

app:layout\_constraintEnd\_toStartOf="@+id/e2"

app:layout\_constraintHorizontal\_bias="0.0"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/t1" />

<EditText

android:id="@+id/e2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="10dp"

android:layout\_marginTop="8dp"

android:layout\_marginEnd="10dp"

android:ems="10"

android:hint="enter last name"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toEndOf="@+id/t2"

app:layout\_constraintTop\_toBottomOf="@+id/e1" />

<TextView

android:id="@+id/t3"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="10dp"

android:layout\_marginTop="60dp"

android:layout\_marginEnd="10dp"

android:text="gender :"

app:layout\_constraintEnd\_toStartOf="@+id/e2"

app:layout\_constraintHorizontal\_bias="0.34"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/t2" />

<EditText

android:id="@+id/e4"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="10dp"

android:layout\_marginTop="30dp"

android:layout\_marginEnd="10dp"

android:ems="10"

android:hint="enter email id"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toEndOf="@+id/t4"

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

<TextView

android:id="@+id/t4"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="5dp"

android:layout\_marginTop="84dp"

android:layout\_marginEnd="10dp"

android:text="email :"

app:layout\_constraintEnd\_toStartOf="@+id/e4"

app:layout\_constraintHorizontal\_bias="0.254"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/t3" />

<TextView

android:id="@+id/t5"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="40dp"

android:layout\_marginTop="48dp"

android:text="Phone No :"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/t4" />

<EditText

android:id="@+id/e5"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="10dp"

android:layout\_marginTop="20dp"

android:layout\_marginEnd="10dp"

android:ems="10"

android:hint="enter phone number"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toEndOf="@+id/t5"

app:layout\_constraintTop\_toBottomOf="@+id/e4" />

<TextView

android:id="@+id/t6"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="10dp"

android:layout\_marginTop="36dp"

android:layout\_marginEnd="10dp"

android:text="password :"

app:layout\_constraintEnd\_toStartOf="@+id/e4"

app:layout\_constraintHorizontal\_bias="0.346"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/t5" />

<EditText

android:id="@+id/e6"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="10dp"

android:layout\_marginTop="20dp"

android:layout\_marginEnd="10dp"

android:ems="10"

android:hint="enter password"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toEndOf="@+id/t6"

app:layout\_constraintTop\_toBottomOf="@+id/e5" />

<TextView

android:id="@+id/t7"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="20dp"

android:layout\_marginTop="56dp"

android:layout\_marginEnd="20dp"

android:text="Date of Birth"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.041"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/t6" />

<EditText

android:id="@+id/e7"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="10dp"

android:layout\_marginTop="20dp"

android:layout\_marginEnd="10dp"

android:ems="10"

android:hint="enter date of birth"

android:inputType="date"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toEndOf="@+id/t7"

app:layout\_constraintTop\_toBottomOf="@+id/e6" />

<TextView

android:id="@+id/t1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="10dp"

android:layout\_marginTop="100dp"

android:layout\_marginEnd="10dp"

android:text="first name :"

app:layout\_constraintEnd\_toStartOf="@+id/e1"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

<Button

android:id="@+id/b1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="128dp"

android:layout\_marginTop="40dp"

android:layout\_marginEnd="193dp"

android:text="Register"

android:onClick="register"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/e7" />

<RadioGroup

android:id="@+id/radioGroup"

android:layout\_width="232dp"

android:layout\_height="60dp"

android:layout\_marginStart="10dp"

android:layout\_marginTop="36dp"

android:layout\_marginEnd="10dp"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.882"

app:layout\_constraintStart\_toEndOf="@+id/t3"

app:layout\_constraintTop\_toBottomOf="@+id/e2">

<RadioButton

android:id="@+id/r1"

android:layout\_width="match\_parent"

android:layout\_height="24dp"

android:text="male" />

<RadioButton

android:id="@+id/r2"

android:layout\_width="match\_parent"

android:layout\_height="36dp"

android:text="female" />

</RadioGroup>

</androidx.constraintlayout.widget.ConstraintLayout>

**MainActivity.java:**

package com.example.registration;

import android.content.Context;

import android.content.Intent;

import android.content.SharedPreferences;

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;

import androidx.activity.EdgeToEdge;

import androidx.appcompat.app.AppCompatActivity;

import androidx.core.graphics.Insets;

import androidx.core.view.ViewCompat;

import androidx.core.view.WindowInsetsCompat;

public class MainActivity extends AppCompatActivity {

private EditText firstNameEditText;

private EditText lastNameEditText;

private Button registerButton;

private RadioGroup radioGroup;

private EditText emailEditText;

private EditText phoneNumberEditText;

private EditText passwordEditText;

private EditText dateOfBirthEditText;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

EdgeToEdge.enable(this);

setContentView(R.layout.activity\_main);

ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {

Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());

v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);

return insets;

});

firstNameEditText = findViewById(R.id.e1);

lastNameEditText = findViewById(R.id.e2);

registerButton = findViewById(R.id.b1);

radioGroup = findViewById(R.id.radioGroup);

emailEditText = findViewById(R.id.e4);

phoneNumberEditText = findViewById(R.id.e5);

passwordEditText = findViewById(R.id.e6);

dateOfBirthEditText = findViewById(R.id.e7);

}

public void register(View view) {

clearErrors();

String firstName = firstNameEditText.getText().toString();

String lastName = lastNameEditText.getText().toString();

String email = emailEditText.getText().toString();

String phoneNumber = phoneNumberEditText.getText().toString();

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

String dateOfBirth = dateOfBirthEditText.getText().toString();

boolean hasError = false;

String selectedOption = null;

if (firstName.isEmpty()) {

firstNameEditText.setError("First Name is required");

hasError = true;

}

if (lastName.isEmpty()) {

lastNameEditText.setError("Last Name is required");

hasError = true;

}

// Check if a gender is selected

int selectedId = radioGroup.getCheckedRadioButtonId();

if (selectedId == -1) {

Toast.makeText(this, "Gender is required", Toast.LENGTH\_SHORT).show();

hasError = true;

} else {

RadioButton selectedRadioButton = findViewById(selectedId);

selectedOption = selectedRadioButton.getText().toString();

}

// Validate email

if (email.isEmpty()) {

emailEditText.setError("Email is required");

hasError = true;

} else if (!email.contains("@")) {

emailEditText.setError("Email must contain '@'");

hasError = true;

}

// Validate phone number

if (phoneNumber.isEmpty()) {

phoneNumberEditText.setError("Phone Number is required");

hasError = true;

} else if (!phoneNumber.matches("\\d+")) {

// Check if phone number contains only digits

phoneNumberEditText.setError("Phone Number must contain only digits");

hasError = true;

}

// Validate password

if (password.isEmpty()) {

passwordEditText.setError("Password is required");

hasError = true;

}

// Validate date of birth (assuming format YYYY)

if (dateOfBirth.isEmpty()) {

dateOfBirthEditText.setError("Date of Birth is required");

hasError = true;

}

if (hasError) return;

// Save to SharedPreferences

SharedPreferences sharedPreferences =

getSharedPreferences("UserPreferences", Context.MODE\_PRIVATE);

SharedPreferences.Editor editor = sharedPreferences.edit();

editor.putString("FIRST\_NAME", firstName);

editor.putString("LAST\_NAME", lastName);

editor.putString("SELECTED\_OPTION", selectedOption);

// Store selected option text

editor.putString("EMAIL", email);

editor.putString("PHONE\_NUMBER", phoneNumber);

editor.putString("PASSWORD", password);

editor.putString("DATE\_OF\_BIRTH", dateOfBirth);

editor.apply();

// Start the next activity

Intent intent = new Intent(MainActivity.this, MainActivity2.class);

startActivity(intent);

}

private void clearErrors() {

firstNameEditText.setError(null);

lastNameEditText.setError(null);

emailEditText.setError(null);

phoneNumberEditText.setError(null);

passwordEditText.setError(null);

dateOfBirthEditText.setError(null);

}

}

**activity\_main2.xml:**

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

<androidx.constraintlayout.widget.ConstraintLayout

xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:app="http://schemas.android.com/apk/res-auto"

xmlns:tools="http://schemas.android.com/tools"

android:id="@+id/main"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity2">

<TextView

android:id="@+id/l1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="153dp"

android:layout\_marginTop="137dp"

android:layout\_marginEnd="200dp"

android:text="TextView"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>

**MainActivity2.java:**

package com.example.registration;

import android.content.Context;

import android.content.SharedPreferences;

import android.os.Bundle;

import android.widget.TextView;

import androidx.activity.EdgeToEdge;

import androidx.appcompat.app.AppCompatActivity;

import androidx.core.graphics.Insets;

import androidx.core.view.ViewCompat;

import androidx.core.view.WindowInsetsCompat;

public class MainActivity2 extends AppCompatActivity {

private TextView displayNameTextView;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

EdgeToEdge.enable(this);

setContentView(R.layout.activity\_main2);

ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {

Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());

v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);

return insets;

});

displayNameTextView = findViewById(R.id.l1);

SharedPreferences sharedPreferences = getSharedPreferences("UserPreferences", Context.MODE\_PRIVATE);

String firstName = sharedPreferences.getString("FIRST\_NAME", "N/A");

String lastName = sharedPreferences.getString("LAST\_NAME", "N/A");

String selectedOption = sharedPreferences.getString("SELECTED\_OPTION", "N/A");

String email = sharedPreferences.getString("EMAIL", "N/A");

String phoneNumber =

sharedPreferences.getString("PHONE\_NUMBER", "N/A");

String password = sharedPreferences.getString("PASSWORD", "N/A");

String dateOfBirth = sharedPreferences.getString("DATE\_OF\_BIRTH",

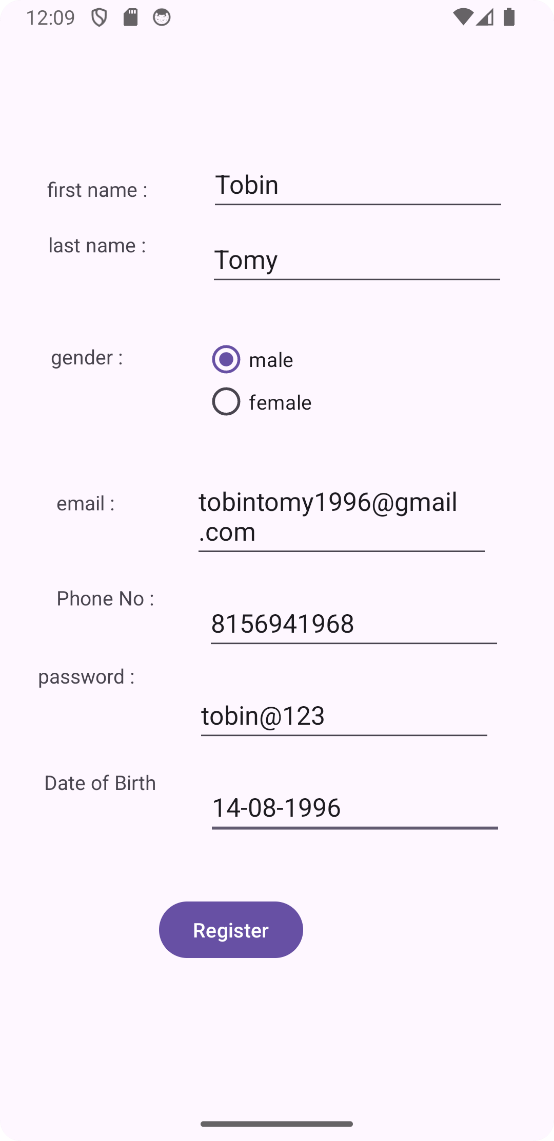
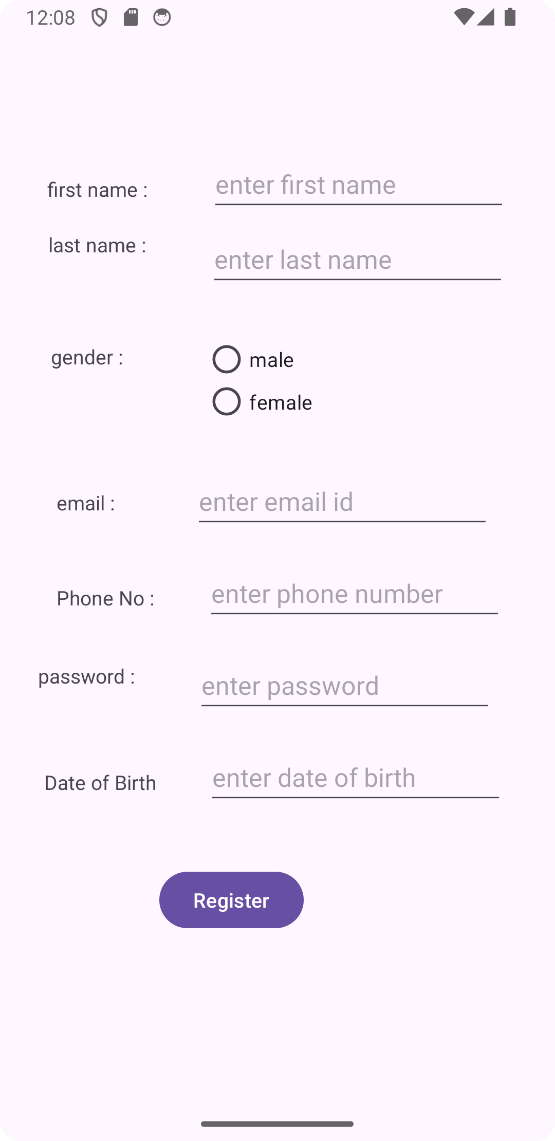
"N/A");

displayNameTextView.setText("First Name: " +firstName + "\n"+"Last Name: " + lastName + "\n"+"Gender: " +selectedOption+ "\n" + "Email: " + email+ "\n" + "Phone Number: " + phoneNumber+ "\n" + "Password: " + password+ "\n" + "Date of Birth: " + dateOfBirth);

}

}

**Output :**



Sreyas

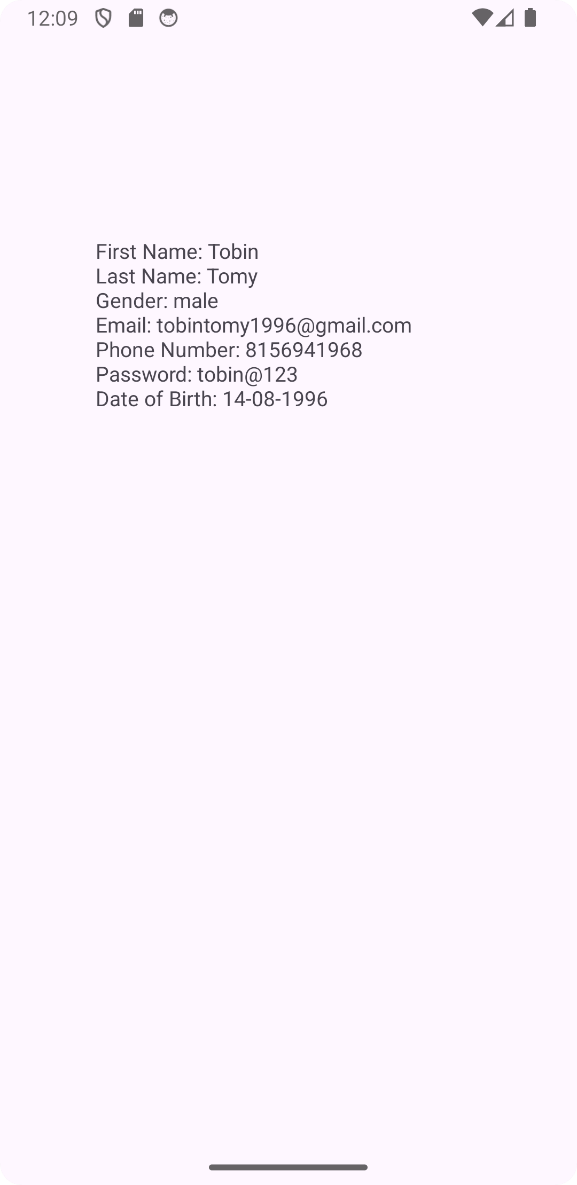
sreyas@123

7752365595

08-08-2003

sreyas@gmail.com

Satheesh



First Name: Sreyas

Last Name: Satheesh

Gender: male

Email: sreyas@gmail.com

Phone Number: 7752365595

Password: sreyas@123

Date of Birth: 08-08-2003

**PROGRAM 9:**

**Write a program to open Facebook page on button click**

**Code :**

**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:id="@+id/main"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity">

<Button

android:id="@+id/button"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="20dp"

android:layout\_marginTop="350dp"

android:layout\_marginEnd="20dp"

android:onClick="fb"

android:text="Click here"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>

**MainActivity.java:**

package com.example.fb;

import android.content.Intent;

import android.net.Uri;

import android.os.Bundle;

import android.view.View;

import androidx.activity.EdgeToEdge;

import androidx.appcompat.app.AppCompatActivity;

import androidx.core.graphics.Insets;

import androidx.core.view.ViewCompat;

import androidx.core.view.WindowInsetsCompat;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

EdgeToEdge.enable(this);

setContentView(R.layout.activity\_main);

ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {

Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());

v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);

return insets;

});

}

public void fb(View view) {

String url = "https://www.facebook.com/login/";

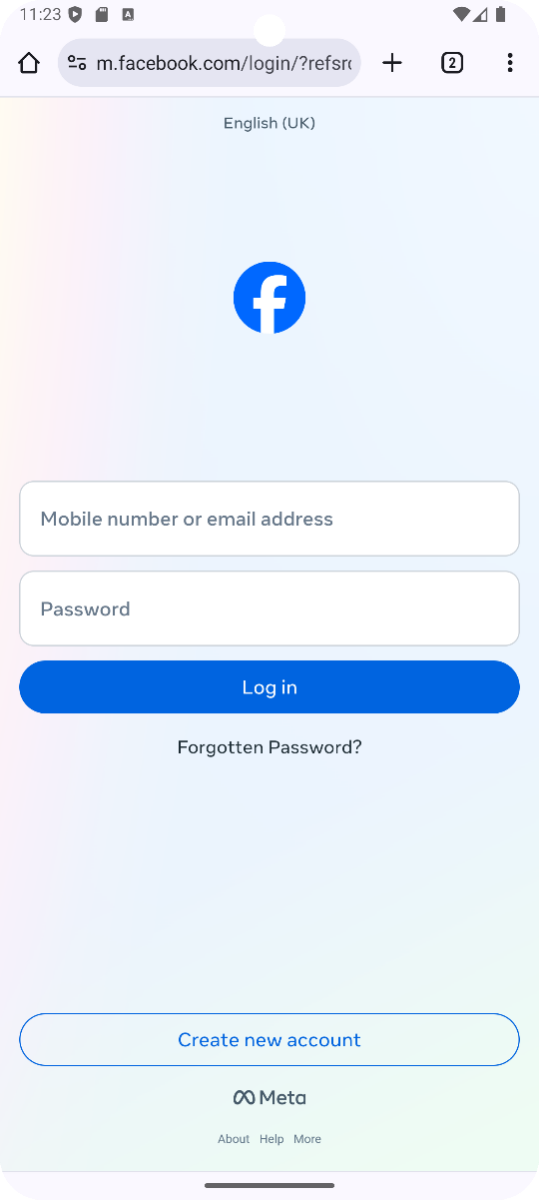
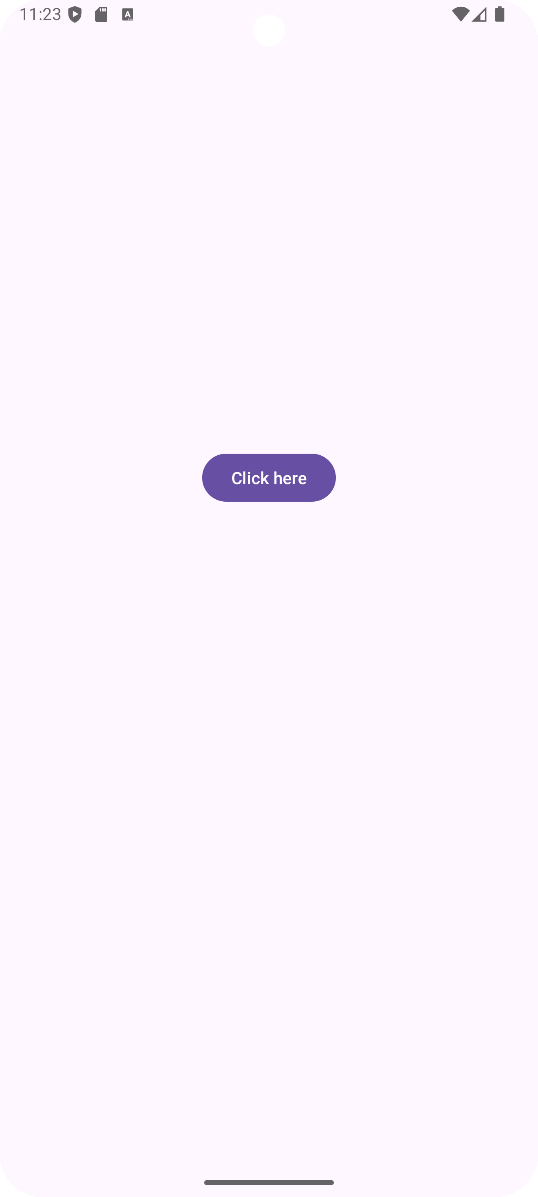
Intent intent = new Intent(Intent.ACTION\_VIEW, Uri.parse(url));

startActivity(intent);

}

}

**Output :**



**PROGRAM 10:**

**Design a Login Form with username and password using Linear Layout**

**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:id="@+id/main"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:orientation="vertical"

android:gravity="center"

tools:context=".MainActivity">

<EditText

android:id="@+id/username"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:hint="Username"

android:layout\_marginLeft="25dp"

android:layout\_marginRight="25dp"

android:layout\_marginBottom="20dp"

android:inputType="text"/>

<EditText

android:id="@+id/password"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:hint="Password"

android:layout\_marginLeft="25dp"

android:layout\_marginRight="25dp"

android:layout\_marginTop="20dp"

android:inputType="textPassword"/>

<Button

android:id="@+id/login\_button"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginLeft="25dp"

android:layout\_marginRight="25dp"

android:layout\_marginTop="40dp"

android:onClick="login"

android:text="Login"/>

</LinearLayout>

**MainActivity.java:**

package com.example.lin;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

import androidx.activity.EdgeToEdge;

import androidx.appcompat.app.AppCompatActivity;

import androidx.core.graphics.Insets;

import androidx.core.view.ViewCompat;

import androidx.core.view.WindowInsetsCompat;

public class MainActivity extends AppCompatActivity {

private EditText o1;

private EditText o2;

private Button loginButton;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

EdgeToEdge.enable(this);

setContentView(R.layout.activity\_main);

ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {

Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());

v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);

return insets;

});

o1 = findViewById(R.id.username);

o2 = findViewById(R.id.password);

loginButton = findViewById(R.id.login\_button);

}

public void login(View view) {

String username = o1.getText().toString();

String password = o2.getText().toString();

if (isValidCredentials(username, password)) {

Toast.makeText(this, "Login Successful", Toast.LENGTH\_SHORT).show();

} else {

Toast.makeText(this, "Invalid credentials", Toast.LENGTH\_SHORT).show();

}

}

private boolean isValidCredentials(String username, String password) {

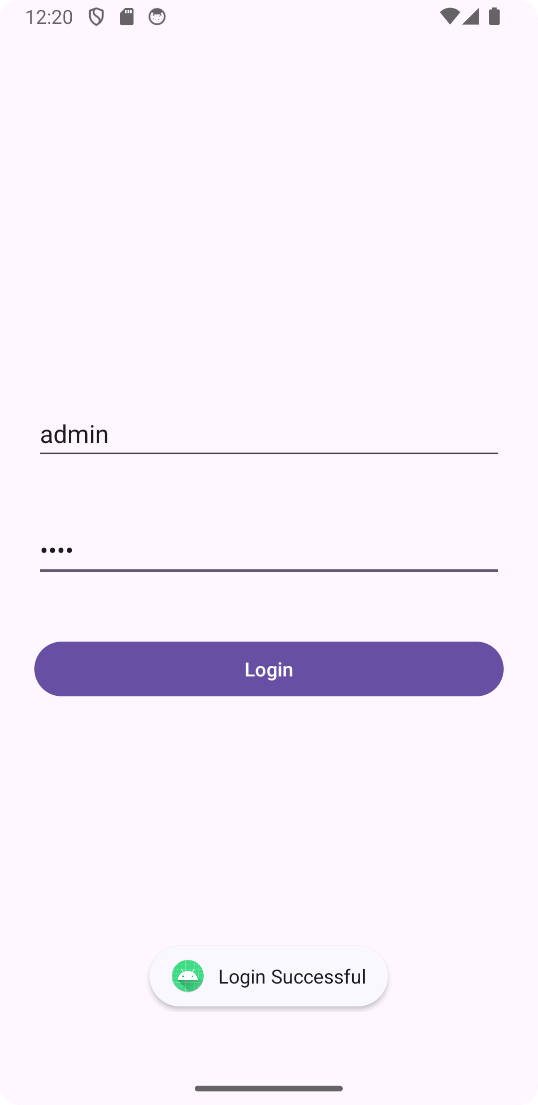
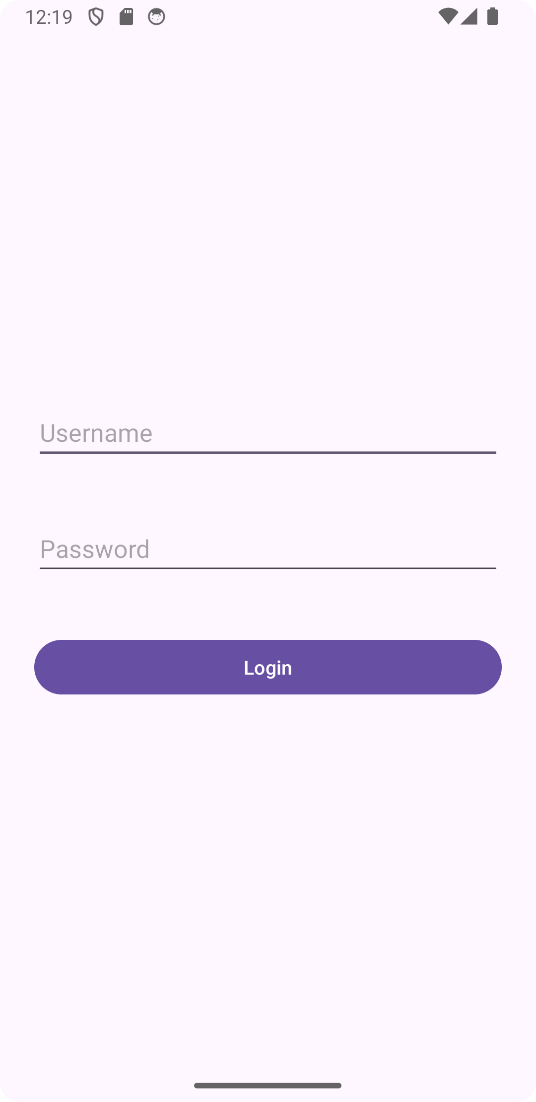
// Example validation: Replace with your own logic

return username.equals("admin") && password.equals("1234");

}

}

**Output :**



**PROGRAM 11:**

**Design a Login Form with username and password using Relative Layout**

**Code :**

**activity\_main.xml:**

<?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:id="@+id/main"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:gravity="center"

tools:context=".MainActivity">

<EditText

android:id="@+id/name"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginLeft="40dp"

android:layout\_marginRight="40dp"

android:hint="name"/>

<EditText

android:id="@+id/address"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginRight="10dp"

android:layout\_marginLeft="40dp"

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

android:hint="address"/>

<EditText

android:id="@+id/RollNo"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

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

android:layout\_marginLeft="20dp"

android:layout\_marginRight="90dp"

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

android:hint="Roll No"/>

<EditText

android:id="@+id/PhNo"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

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

android:layout\_centerHorizontal="true"

android:hint="Ph No"/>

</RelativeLayout>

**MainActivity.java:**

package com.example.relative;

import android.os.Bundle;

import androidx.activity.EdgeToEdge;

import androidx.appcompat.app.AppCompatActivity;

import androidx.core.graphics.Insets;

import androidx.core.view.ViewCompat;

import androidx.core.view.WindowInsetsCompat;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

EdgeToEdge.enable(this);

setContentView(R.layout.activity\_main);

ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {

Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());

v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);

return insets;

});

}

}

**Output :**



**PROGRAM 12:**

**Develop an application that uses ArrayAdapter with List View**

**Code :**

**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:id="@+id/main"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity">

<TextView

android:id="@+id/e1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="50dp"

android:layout\_marginTop="20dp"

android:layout\_marginEnd="50dp"

android:text="Hello World!"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

<ListView

android:id="@+id/l1"

android:layout\_width="338dp"

android:layout\_height="186dp"

android:layout\_marginStart="50dp"

android:layout\_marginTop="51dp"

android:layout\_marginEnd="50dp"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/e1" />

<TextView

android:id="@+id/textView"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="50dp"

android:layout\_marginTop="267dp"

android:layout\_marginEnd="50dp"

android:text="Account"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>

**MainActivity.java:**

package com.example.listview;

import android.os.Bundle;

import android.view.View;

import android.widget.AdapterView;

import android.widget.ArrayAdapter;

import android.widget.ListView;

import android.widget.TextView;

import android.widget.Toast;

import androidx.activity.EdgeToEdge;

import androidx.appcompat.app.AppCompatActivity;

import androidx.core.graphics.Insets;

import androidx.core.view.ViewCompat;

import androidx.core.view.WindowInsetsCompat;

public class MainActivity extends AppCompatActivity implements

AdapterView.OnItemClickListener {

private TextView tv;

private ListView lv;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

EdgeToEdge.enable(this);

setContentView(R.layout.activity\_main);

ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {

Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());

v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);

return insets;

});

tv=findViewById(R.id.e1);

String msg=getIntent().getStringExtra("mykey");// receiving the data

tv.setText("welcome " + msg);

lv=findViewById(R.id.l1);// display(welcome changing to admin)

// listview operation

String[] courses={"MCA","MBA","BBA","BCA"};

ArrayAdapter adapter = new ArrayAdapter(this,

android.R.layout.simple\_list\_item\_1,courses);

lv.setAdapter(adapter);

// attach listener

lv.setOnItemClickListener(this);//implement the method by alt+enter

}

public void onItemClick(AdapterView<?> adapterView, View view, int i,

long l) {

String itemname=lv.getItemAtPosition(i).toString();

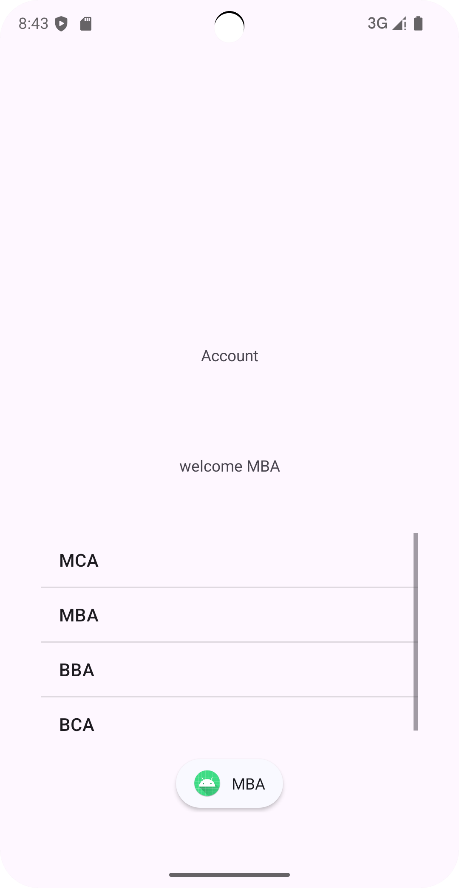
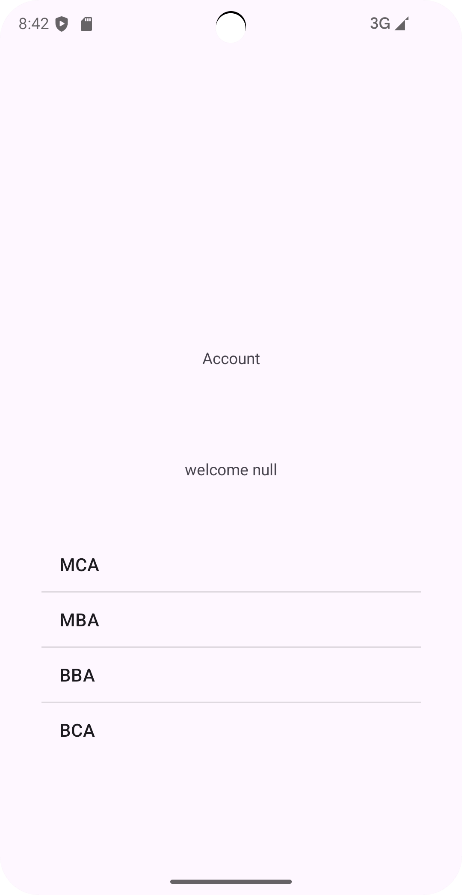
tv.setText("welcome " + itemname);

Toast.makeText(this,itemname,Toast.LENGTH\_SHORT).show();

}

}

**Output :**



**PROGRAM 13:**

**Develop an application that uses ArrayAdapter with Grid View**

**Code :**

**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:id="@+id/main"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity">

<TextView

android:id="@+id/e1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="20dp"

android:layout\_marginTop="47dp"

android:layout\_marginEnd="20dp"

android:layout\_marginBottom="512dp"

android:text="Hello World!"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

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

<TextView

android:id="@+id/textView"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="20dp"

android:layout\_marginTop="134dp"

android:layout\_marginEnd="20dp"

android:text="Account"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

<GridView

android:id="@+id/grid"

android:layout\_width="176dp"

android:layout\_height="353dp"

android:layout\_marginStart="20dp"

android:layout\_marginTop="68dp"

android:layout\_marginEnd="20dp"

android:numColumns="2"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.584"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/e1" />

</androidx.constraintlayout.widget.ConstraintLayout>

**MainActivity.java:**

package com.example.gridview;

import android.os.Bundle;

import android.view.View;

import android.widget.AdapterView;

import android.widget.ArrayAdapter;

import android.widget.GridView;

import android.widget.TextView;

import android.widget.Toast;

import androidx.activity.EdgeToEdge;

import androidx.appcompat.app.AppCompatActivity;

import androidx.core.graphics.Insets;

import androidx.core.view.ViewCompat;

import androidx.core.view.WindowInsetsCompat;

public class MainActivity extends AppCompatActivity implements

AdapterView.OnItemClickListener {

private TextView tv;

private GridView gv;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

EdgeToEdge.enable(this);

setContentView(R.layout.activity\_main);

ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {

Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());

v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);

return insets;

});

tv=findViewById(R.id.e1);

String msg=getIntent().getStringExtra("mykey");// receiving the data

tv.setText("welcome"+msg);

gv=findViewById(R.id.grid);// display(welcome changing to admin)

// listvivew operation

String[] courses={"MCA","MBA","BBA","BCA"};

ArrayAdapter adapter = new ArrayAdapter(this,

android.R.layout.simple\_list\_item\_1,courses);

gv.setAdapter(adapter);

// attach listener

gv.setOnItemClickListener(this);

}

public void onItemClick(AdapterView<?> adapterView, View view, int i,

long l) {

String itemname=gv.getItemAtPosition(i).toString();

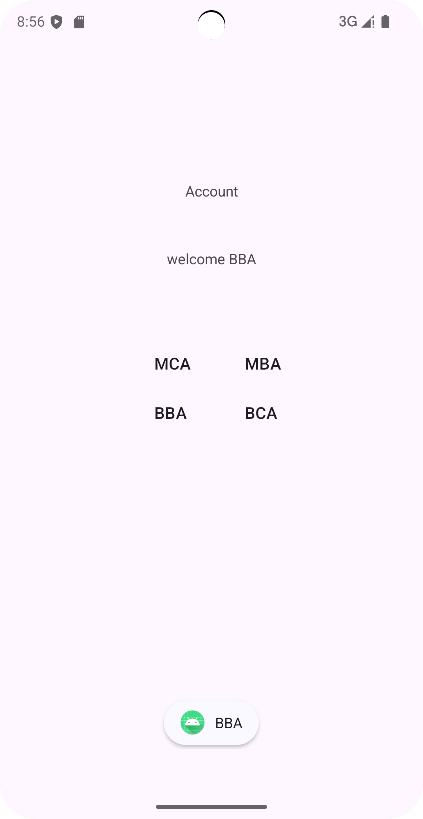
tv.setText("welcome "+itemname);

Toast.makeText(this,itemname,Toast.LENGTH\_SHORT).show();

}

}

**Output :**



**PROGRAM 14:**

**Create database using SQLite and perform INSERT, SELECT, UPDATE and DELETE**

**Code :**

**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:id="@+id/main"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <EditText  
 android:id="@+id/ed1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="20dp"  
 android:layout\_marginTop="20dp"  
 android:layout\_marginEnd="20dp"  
 android:ems="10"  
 android:hint="Name"  
 android:inputType="text"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <EditText  
 android:id="@+id/ed2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="20dp"  
 android:layout\_marginTop="20dp"  
 android:layout\_marginEnd="20dp"  
 android:ems="10"  
 android:hint="Surname"  
 android:inputType="text"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/ed1" />  
  
 <EditText  
 android:id="@+id/ed3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="20dp"  
 android:layout\_marginTop="20dp"  
 android:layout\_marginEnd="20dp"  
 android:ems="10"  
 android:hint="Marks"  
 android:inputType="text"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/ed2" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="104dp"  
 android:layout\_marginTop="52dp"  
 android:text="insert"  
 android:onClick="SaveData"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/ed3" />  
  
 <Button  
 android:id="@+id/button2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="52dp"  
 android:layout\_marginEnd="104dp"  
 android:text="Display"  
 android:onClick="read"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/ed3" />  
  
 <Button  
 android:id="@+id/button3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="104dp"  
 android:layout\_marginTop="24dp"  
 android:text="Update"  
 android:onClick="update"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/button" />  
  
 <Button  
 android:id="@+id/button4"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="24dp"  
 android:layout\_marginEnd="103dp"  
 android:text="Delete"  
 android:onClick="delete"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/button2" />  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="20dp"  
 android:layout\_marginTop="74dp"  
 android:layout\_marginEnd="20dp"  
 android:text="Details"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/button3" />  
</androidx.constraintlayout.widget.ConstraintLayout>

**MainActivity.java:**

package com.example.db;  
import android.database.Cursor;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.EditText;  
import android.widget.TextView;  
import android.widget.Toast;  
  
import androidx.activity.EdgeToEdge;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.core.graphics.Insets;  
import androidx.core.view.ViewCompat;  
import androidx.core.view.WindowInsetsCompat;  
  
public class MainActivity extends AppCompatActivity {  
 private EditText Name,Mark,Surname;  
 private TextView DataV;  
 MyDatabase database = new MyDatabase(this) ;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 EdgeToEdge.*enable*(this);  
 setContentView(R.layout.*activity\_main*);  
 ViewCompat.*setOnApplyWindowInsetsListener*(findViewById(R.id.*main*), (v, insets) -> {  
 Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.*systemBars*());  
 v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);  
 return insets;  
 });  
 Name = findViewById(R.id.*ed1*);  
 Surname = findViewById(R.id.*ed2*);  
 Mark = findViewById(R.id.*ed3*);  
 DataV = findViewById(R.id.*textView*);  
 }  
  
 public void SaveData(View view) {  
 String UserVal = Name.getText().toString();  
 String SurnameVal = Surname.getText().toString();  
 Integer PassVal = Integer.*parseInt*(Mark.getText().toString());  
 Boolean result = database.insertdata(UserVal, PassVal,SurnameVal);  
 if (result == true) {  
 Toast.*makeText*(getApplicationContext(), "Data inserted Sucessfully",  
 Toast.*LENGTH\_SHORT*).show();  
 } else {  
 Toast.*makeText*(getApplicationContext(), "Data inserted failed",  
 Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
  
 public void update(View view) {  
 String UserVal = Name.getText().toString();  
 String SurnameVal = Surname.getText().toString();  
 Integer PassVal = Integer.*parseInt*(Mark.getText().toString());  
 Boolean result = database.updateData(UserVal, PassVal, SurnameVal);  
 if (result==true){  
 Toast.*makeText*(getApplicationContext(), "Data updated

Successfully", Toast.*LENGTH\_SHORT*).show();  
 read(view);  
 }  
 else {  
 Toast.*makeText*(getApplicationContext(), "No Rows Affected",

Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
 public void delete(View view) {  
 String UserVal = Name.getText().toString();  
 int result=database.deletedata(UserVal);  
 Toast.*makeText*(getApplicationContext(), "Data deleted Successfully",

Toast.*LENGTH\_SHORT*).show();  
 }  
 public void read(View view) {  
 Cursor res = database.getAllData();  
 StringBuffer stringBuffer = new StringBuffer();  
 if (res != null && res.getCount() > 0) {  
 while (res.moveToNext()) {  
 stringBuffer.append("Id: " + res.getString(0) + "\n");  
 stringBuffer.append("Name: " + res.getString(1) + "\n");  
 stringBuffer.append("Surname: " + res.getString(2) + "\n");  
 stringBuffer.append("marks: " + res.getString(3) + "\n");  
 }  
 DataV .setText(stringBuffer.toString());  
 } else {  
 Toast.*makeText*(getApplicationContext(), "Data Retrieved Successfully",  
 Toast.*LENGTH\_SHORT*).show();  
 }  
 Toast.*makeText*(getApplicationContext(), "Data Retrieved Successfully",  
 Toast.*LENGTH\_SHORT*).show();  
 }  
}

**activity\_my\_database.xml:**

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

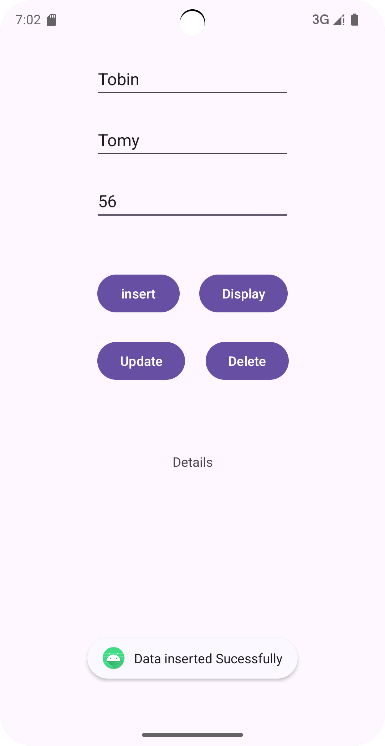
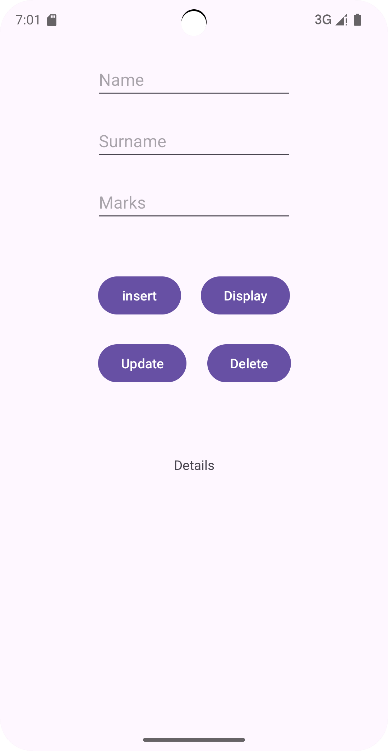
<androidx.constraintlayout.widget.ConstraintLayout

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:id="@+id/main"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MyDatabase">  
  
 </androidx.constraintlayout.widget.ConstraintLayout>

**MyDatabase.java**

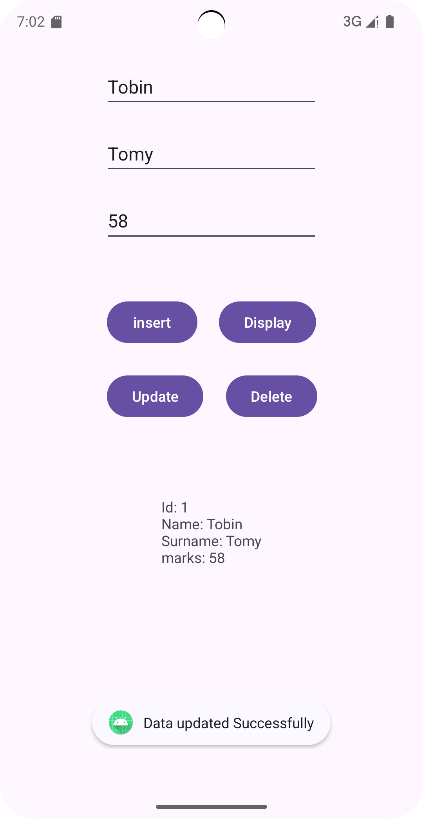
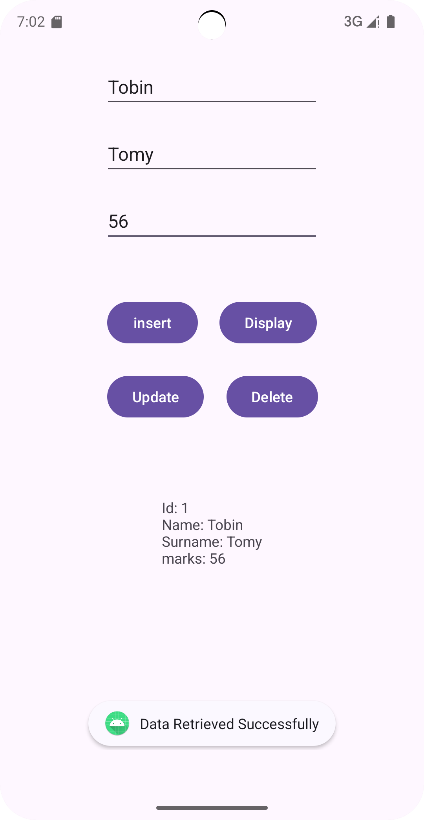
package com.example.db;  
import android.content.ContentValues;  
import android.content.Context;  
import android.database.Cursor;  
import android.database.sqlite.SQLiteDatabase;  
import android.database.sqlite.SQLiteOpenHelper;  
import android.os.Bundle;  
  
import androidx.activity.EdgeToEdge;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.core.graphics.Insets;  
import androidx.core.view.ViewCompat;  
import androidx.core.view.WindowInsetsCompat;  
  
public class MyDatabase extends SQLiteOpenHelper {  
  
 public MyDatabase(Context context) {  
 super(context, "Login.db", null, 1);  
 }  
 public void onCreate(SQLiteDatabase db) {  
 db.execSQL("Create table USERS(ID INTEGER PRIMARY KEY AUTOINCREMENT,NAME text,SURNAME text,MARKS INTEGER)");  
 }  
  
 public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {  
 db.execSQL("DROP TABLE IF EXISTS USERS");  
 }  
 public Cursor getAllData() {  
 SQLiteDatabase db=this.getWritableDatabase();  
 Cursor res = db.rawQuery("Select \* from USERS",null);  
 return res;  
 }  
 public Boolean insertdata(String userVal, Integer passVal, String surnameVal) {  
 SQLiteDatabase db = this.getWritableDatabase();  
 ContentValues contentValues = new ContentValues();  
 contentValues.put("NAME", userVal);  
 contentValues.put("SURNAME", surnameVal);  
 contentValues.put("MARKS", passVal);  
 long result = db.insert("USERS", null, contentValues);  
 db.close();  
 if (result == -1) {  
 return false;  
 } else {  
 return true;  
 }  
 }  
 public int deletedata(String userVal) {  
 SQLiteDatabase db=this.getWritableDatabase();  
 int i =db.delete("USERS","NAME=?",new String[]{userVal});  
 return i;  
 }  
 public Boolean updateData(String userVal, Integer passVal, String surnameVal) {  
 SQLiteDatabase db = this.getWritableDatabase();  
 ContentValues contentValues = new ContentValues();  
 contentValues.put("NAME", userVal);  
 contentValues.put("SURNAME", surnameVal);  
 contentValues.put("MARKS", passVal);  
 int result = db.update("USERS", contentValues, "NAME=?", new String[]{userVal});  
 if (result > 0) {  
 return true;  
 } else {  
 return false;  
 }  
 }  
}

**Output :**



Satheesh

Sreyas



Id: 1

Name: Sreyas

Surname: Satheesh

Marks: 58

Id: 1

Name: Sreyas

Surname: Satheesh

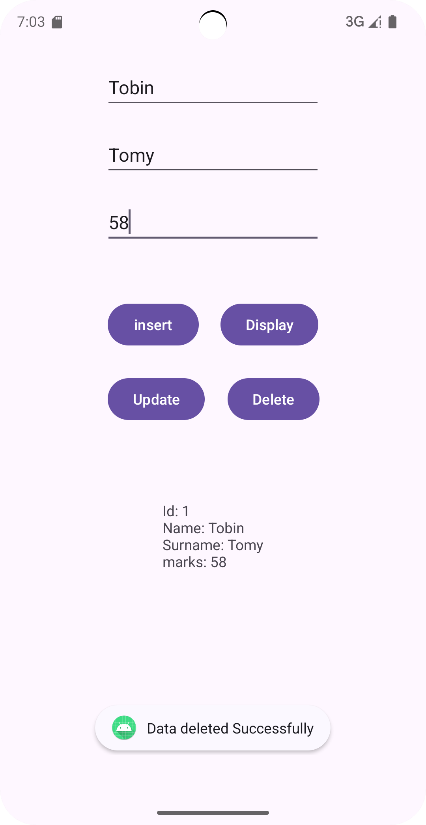
Marks: 56

Satheesh

Sreyas

Satheesh

Sreyas



Id: 1

Name: Sreyas

Surname: Satheesh

Marks: 58

Satheesh

Sreyas