**PROGRAM NO:1**

**Aim:** Program to develop the android mobile application which consist of

GUI components for Login Page creation.

**XML Code:**

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

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

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity"

android:orientation="vertical">

<TextView

android:id="@+id/l"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:ems="10"

android:gravity="center"

android:text="Login"

android:textColor="#630DFB"

android:textSize="50dp"

tools:layout\_editor\_absoluteX="31dp"

tools:layout\_editor\_absoluteY="39dp" />

<EditText

android:id="@+id/e1"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:ems="10"

android:inputType="textPersonName"

android:minHeight="48dp"

android:text="User Name" />

<EditText

android:id="@+id/e2"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:ems="10"

android:inputType="textPassword"

android:minHeight="48dp"

android:text="Password" />

<Button

android:id="@+id/b1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_gravity="right"

android:text="Login" />

</LinearLayout>

**JAVA CODE:**

package com.example.login;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

private TextView l;

private EditText e1;

private EditText e2;

private Button b1;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

b1=findViewById(R.id.b1);

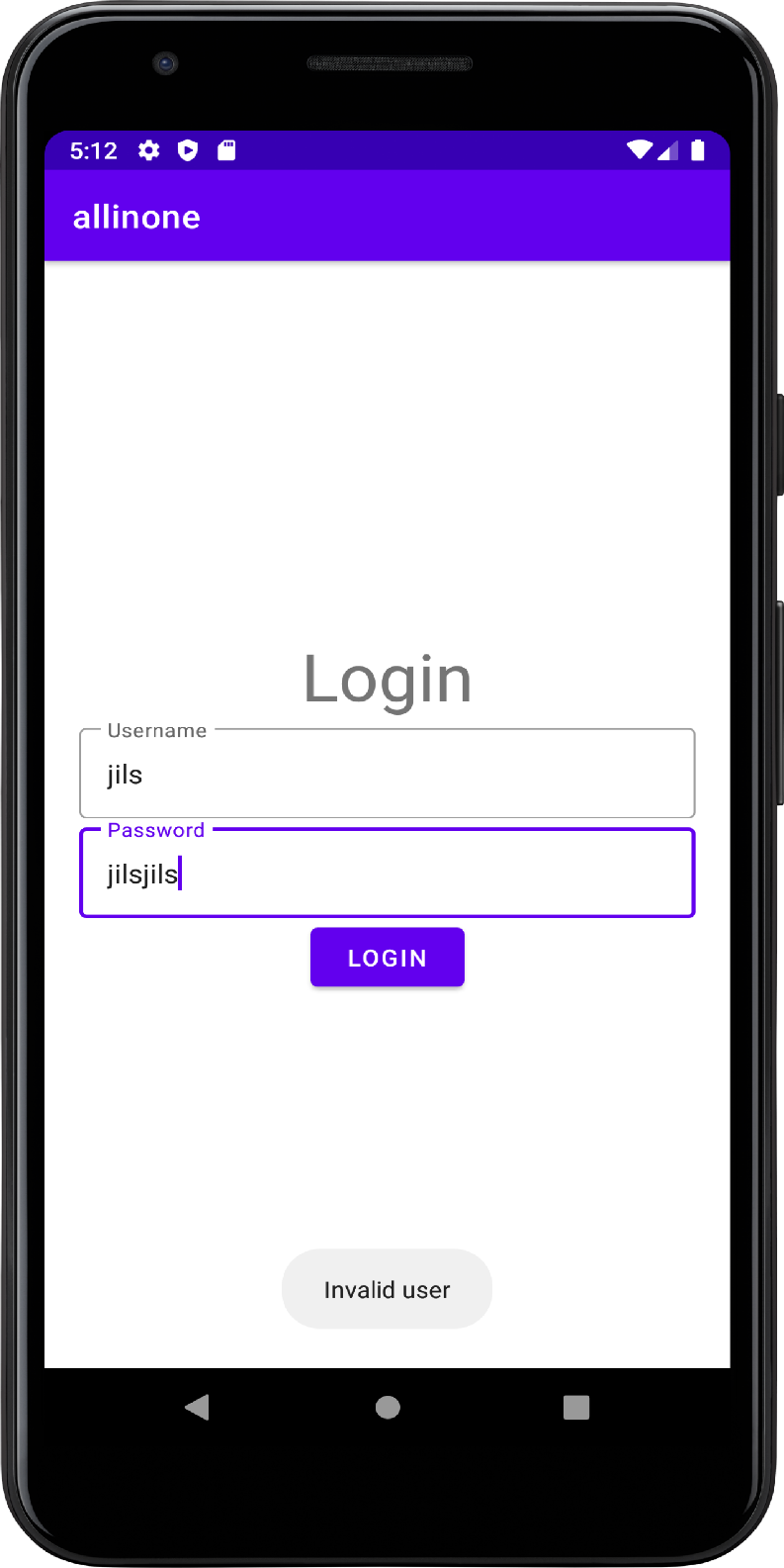
e1=findViewById(R.id.e1);

e2=findViewById(R.id.e2);

}

}

**OUTPUT:**



**PROGRAM NO:2**

**Aim:** Program to display the content of EditText in TextView on button

click.

**XML Code:**

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

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

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

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity"

android:orientation="vertical"

android:background="#DFF6C4">

<EditText

android:id="@+id/text1"

android:layout\_width="261dp"

android:layout\_height="78dp"

android:background="@color/teal\_700"

android:hint="Write here!"

android:textSize="25dp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintLeft\_toLeftOf="parent"

app:layout\_constraintRight\_toRightOf="parent"

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

<Button

android:id="@+id/button"

android:layout\_width="match\_parent"

android:layout\_height="71dp"

android:gravity="center"

android:text="Print" />

<TextView

android:id="@+id/textView2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintLeft\_toLeftOf="parent"

app:layout\_constraintRight\_toRightOf="parent"

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

</LinearLayout>

**JAVA CODE:**

package com.example.textview;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

private EditText t1;

private TextView t2;

private Button b1;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

t1=findViewById(R.id.text1);

t2=findViewById(R.id.textView2);

b1=findViewById(R.id.button);

b1.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

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

t2.setText(String.valueOf(value));

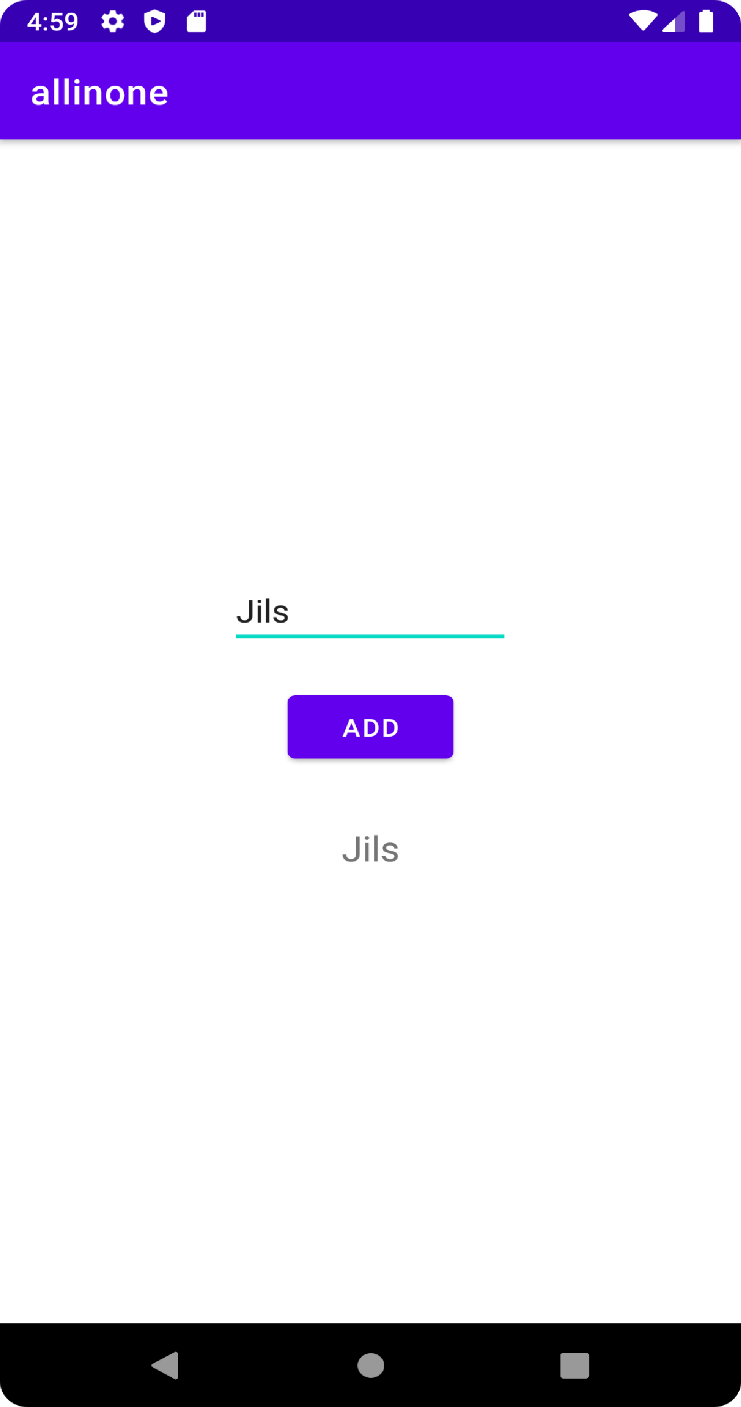
}

});

}

}

**OUTPUT:**

****

**PROGRAM NO:3**

**Aim:** Design a Login Form with username and password using LinearLayout and toast valid credentials

**XML Code:**

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

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

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

xmlns:card\_view="http://schemas.android.com/apk/res-auto"

tools:context=".MainActivity"

android:orientation="vertical"

android:background="#000">

<androidx.cardview.widget.CardView

android:layout\_margin="64dp"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

card\_view:cardCornerRadius="8dp"

card\_view:cardElevation="8dp"

android:background="#fff">

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:orientation="vertical"

android:padding="24dp">

<TextView

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="Login"

android:textSize="36sp"

android:textAlignment="center"

android:layout\_gravity="center\_horizontal" />

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:textSize="22sp"

android:text="username"

android:textColor="@color/black"/>

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:inputType="text"

android:id="@+id/activity\_main\_usernameEditText" />

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:textSize="22sp"

android:text="password"

android:textColor="@color/black"/>

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:inputType="textPassword"

android:id="@+id/activity\_main\_passwordEditText" />

<Button

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/activity\_main\_loginButton"

android:text="login"

android:textSize="22sp"/>

</LinearLayout>

</androidx.cardview.widget.CardView>

</LinearLayout>

**JAVA CODE:**

package com.example.androidloginform;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

private EditText usernameEditText;

private EditText passwordEditText;

private Button loginButton;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

usernameEditText = findViewById(R.id.activity\_main\_usernameEditText);

passwordEditText = findViewById(R.id.activity\_main\_passwordEditText);

loginButton = findViewById(R.id.activity\_main\_loginButton);

loginButton.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

if (usernameEditText.getText().length() > 0 && passwordEditText.getText().length() > 0) {

String toastMessage = "Username: " + usernameEditText.getText().toString() + ", Password: " + passwordEditText.getText().toString();

Toast.makeText(getApplicationContext(), toastMessage, Toast.LENGTH\_SHORT).show();

} else {

String toastMessage = "Username or Password are not populated";

Toast.makeText(getApplicationContext(), toastMessage, Toast.LENGTH\_SHORT).show();

}

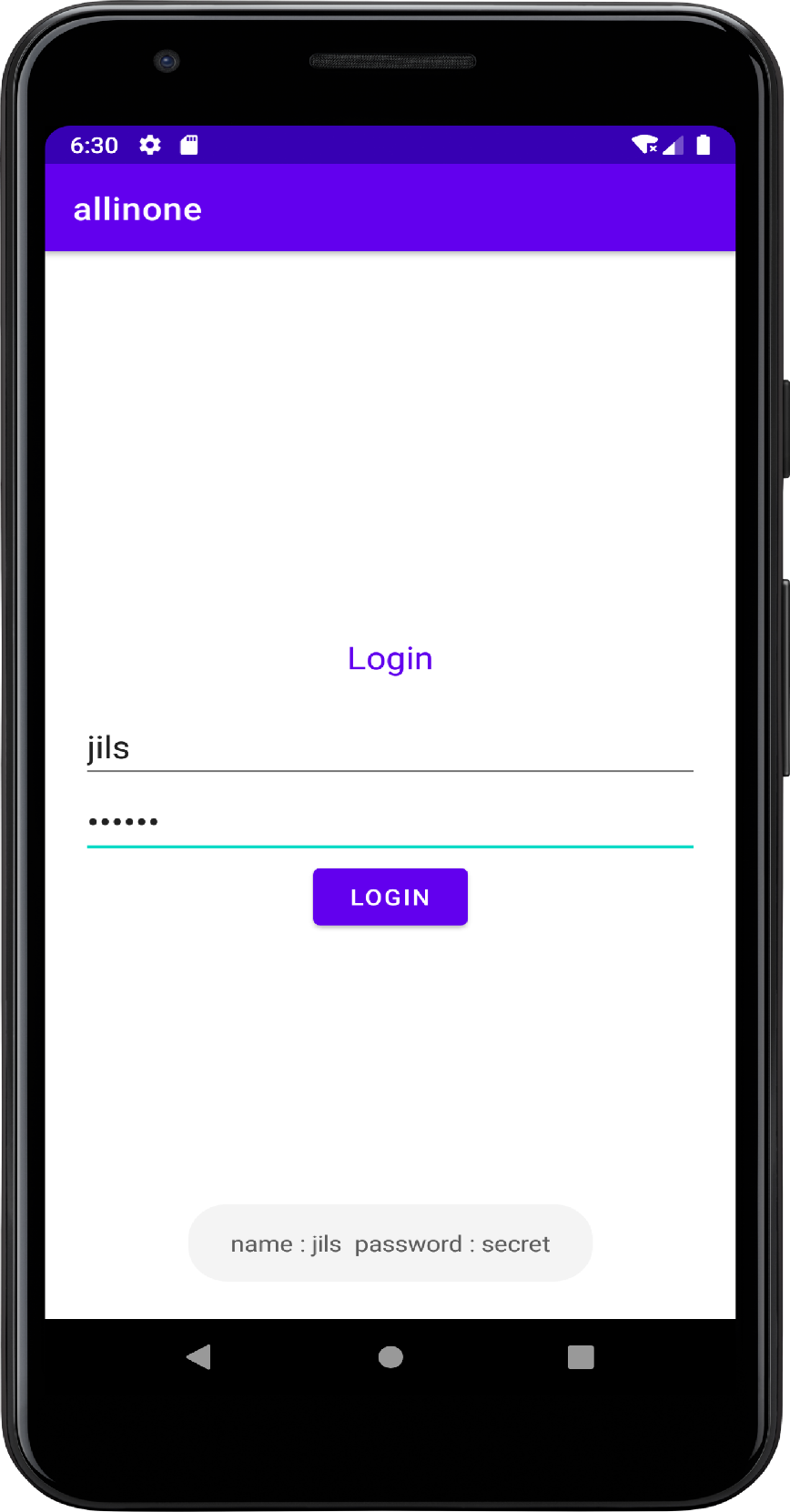
}

});

}

}

**OUTPUT:**

****

**PROGRAM NO:4**

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

**XML Code:**

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
xmlns:app="http://schemas.android.com/apk/res-auto"  
xmlns:tools="http://schemas.android.com/tools"  
android:layout\_width="match\_parent"  
android:layout\_height="match\_parent"  
tools:context=".MainActivity"  
android:padding="20dp"  
android:orientation="vertical"  
android:background="@color/pastel">  
  
<TextView  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:text="CALCULATOR"  
android:textSize="25sp"  
android:layout\_marginBottom="16dp"  
android:textColor="@android:color/black" />  
  
<LinearLayout  
android:layout\_width="match\_parent"  
android:layout\_height="wrap\_content"  
android:orientation="horizontal"  
android:layout\_marginBottom="20dp">  
  
<EditText  
android:id="@+id/first\_no"  
android:layout\_width="102dp"  
android:layout\_height="59dp"  
android:ems="10"  
android:layout\_marginHorizontal="50dp"  
android:hint="Enter" />  
  
<EditText  
android:id="@+id/second\_no"  
android:layout\_width="102dp"  
android:layout\_height="59dp"  
android:ems="10"  
android:hint="Enter" />  
  
</LinearLayout>  
  
<LinearLayout  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:orientation="horizontal"  
android:layout\_marginBottom="20dp">  
  
<TextView  
android:textSize="35sp"  
android:id="@+id/answer"  
android:layout\_width="102dp"  
android:layout\_height="59dp"  
android:layout\_marginHorizontal="50dp"  
android:hint="ans" />  
  
</LinearLayout>  
  
<LinearLayout  
android:orientation="vertical"  
android:layout\_marginLeft="250dp"  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_marginBottom="30dp">  
  
<Button  
android:id="@+id/sub"  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:text="-"  
android:textSize="25sp"  
android:layout\_marginBottom="16dp" />  
  
<Button  
android:id="@+id/add"  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_marginBottom="16dp"  
android:text="+"  
android:textSize="25sp"  
tools:ignore="OnClick" />  
  
<Button  
android:id="@+id/div"  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:text="/"  
android:textSize="25sp"  
android:layout\_marginBottom="16dp" />  
  
<Button  
android:id="@+id/mul"  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_marginBottom="16dp"  
android:text="X"  
android:textSize="25sp"/>  
  
<Button  
android:id="@+id/equals"  
android:layout\_width="wrap\_content"  
android:layout\_height="wrap\_content"  
android:layout\_marginBottom="16dp"  
android:text="="  
android:textSize="35sp"/>  
</LinearLayout>  
</LinearLayout>

**JAVA CODE:**

package com.example.calculator;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

EditText no1 , no2;

Button add ,mul ,div , sub,equal;

TextView answer;

double ans = 0;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

// for text views

no1 = findViewById(R.id.first\_no);

no2 = findViewById(R.id.second\_no);

// for button with operations

add = findViewById(R.id.add);

mul = findViewById(R.id.mul);

div = findViewById(R.id.div);

sub = findViewById(R.id.sub);

// for equal to button

equal = findViewById(R.id.equals);

// for answer field

answer = findViewById(R.id.answer);

add.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

String num1 = no1.getText().toString();

String num2 = no2.getText().toString();

if (num1.isEmpty() || num2.isEmpty()) {

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

}

else {

double a = Double.parseDouble(no1.getText().toString());

double b = Double.parseDouble(no2.getText().toString());

ans = a + b;

}

}

});

sub.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

String num1 = no1.getText().toString();

String num2 = no2.getText().toString();

if (num1.isEmpty() || num2.isEmpty()) {

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

}

else {

double a = Double.parseDouble(no1.getText().toString());

double b = Double.parseDouble(no2.getText().toString());

ans = a - b;

}

}

});

mul.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

String num1 = no1.getText().toString();

String num2 = no2.getText().toString();

if (num1.isEmpty() || num2.isEmpty()) {

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

}

else {

double a = Double.parseDouble(no1.getText().toString());

double b = Double.parseDouble(no2.getText().toString());

ans = a \* b;

}

}

});

div.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

String num1 = no1.getText().toString();

String num2 = no2.getText().toString();

if (num1.isEmpty() || num2.isEmpty()) {

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

} else {

double a = Double.parseDouble(no1.getText().toString());

double b = Double.parseDouble(no2.getText().toString());

if (b != 0)

ans = a / b;

else

Toast.makeText(getApplicationContext(), "Enter Valid Numbers", Toast.LENGTH\_SHORT).show();

}

}

});

equal.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

String ans1 = String.valueOf(ans);

answer.setText(ans1);

ans= 0;

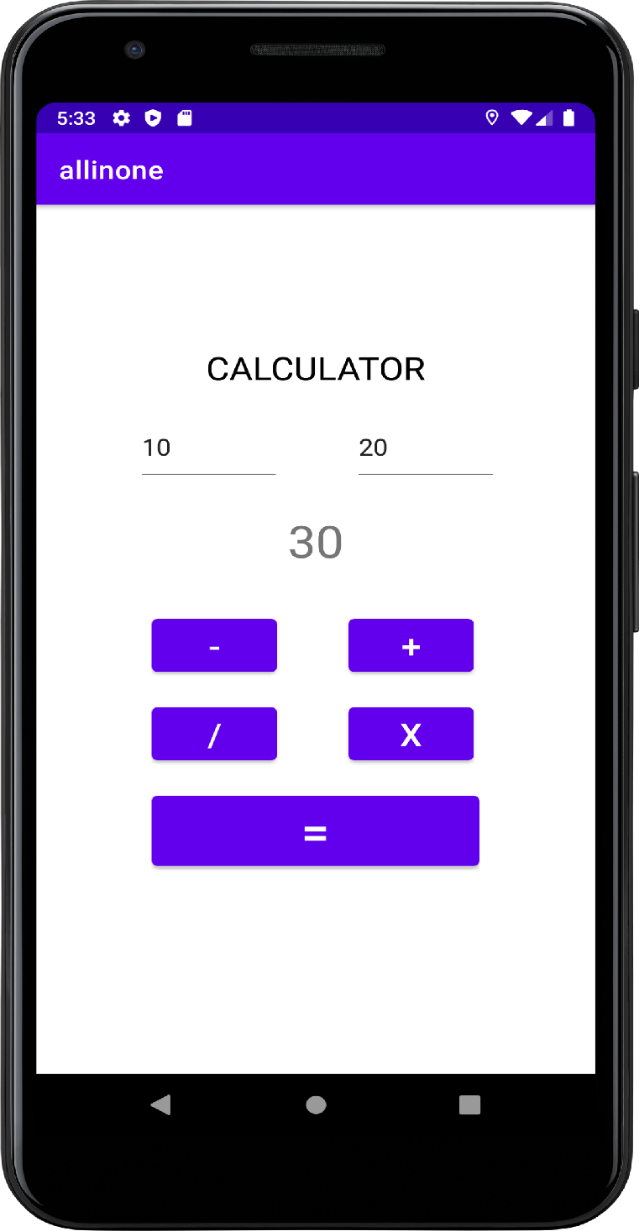
}

});

}

}

**OUTPUT:**

****

**PROGRAM NO:5**

**Aim:** Implement validations on various UI controls

**XML Code:**

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

<LinearLayout

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

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:orientation="vertical"

tools:context=".MainActivity"

tools:ignore="HardcodedText">

<EditText

android:id="@+id/firstName"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginStart="16dp"

android:layout\_marginTop="16dp"

android:layout\_marginEnd="16dp"

android:hint="First Name"

android:inputType="text" />

<EditText

android:id="@+id/lastName"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginStart="16dp"

android:layout\_marginTop="16dp"

android:layout\_marginEnd="16dp"

android:hint="Last Name"

android:inputType="text" />

<EditText

android:id="@+id/email"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginStart="16dp"

android:layout\_marginTop="16dp"

android:layout\_marginEnd="16dp"

android:hint="Email"

android:inputType="textEmailAddress" />

<EditText

android:id="@+id/password"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginStart="16dp"

android:layout\_marginTop="16dp"

android:layout\_marginEnd="16dp"

android:hint="Password"

android:inputType="textPassword" />

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="8dp"

android:gravity="end"

android:orientation="horizontal">

<Button

android:id="@+id/cancelButton"

style="@style/Widget.AppCompat.Button.Borderless"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginEnd="4dp"

android:text="CANCEL"

android:textColor="@color/white" />

<Button

android:id="@+id/proceedButton"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginEnd="16dp"

android:backgroundTint="@color/black"

android:text="PROCEED"

android:textColor="@android:color/white"

tools:ignore="ButtonStyle" />

</LinearLayout>

</LinearLayout>

**JAVA CODE:**

package com.example.validation;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

public class MainActivity extends AppCompatActivity {

Button bCancel, bProceed;

EditText etFirstName, etLastName, etEmail, etPassword;

boolean isAllFieldsChecked = false;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

bProceed = findViewById(R.id.proceedButton);

bCancel = findViewById(R.id.cancelButton);

etFirstName = findViewById(R.id.firstName);

etLastName = findViewById(R.id.lastName);

etEmail = findViewById(R.id.email);

etPassword = findViewById(R.id.password);

bProceed.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

isAllFieldsChecked = CheckAllFields();

if (isAllFieldsChecked) {

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

startActivity(i);

}

}

});

bCancel.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

MainActivity.this.finish();

System.exit(0);

}

});

}

private boolean CheckAllFields() {

if (etFirstName.length() == 0) {

etFirstName.setError("This field is required");

return false;

}

if (etLastName.length() == 0) {

etLastName.setError("This field is required");

return false;

}

if (etEmail.length() == 0) {

etEmail.setError("Email is required");

return false;

}

if (etPassword.length() == 0) {

etPassword.setError("Password is required");

return false;

} else if (etPassword.length() < 8) {

etPassword.setError("Password must be minimum 8 characters");

return false;

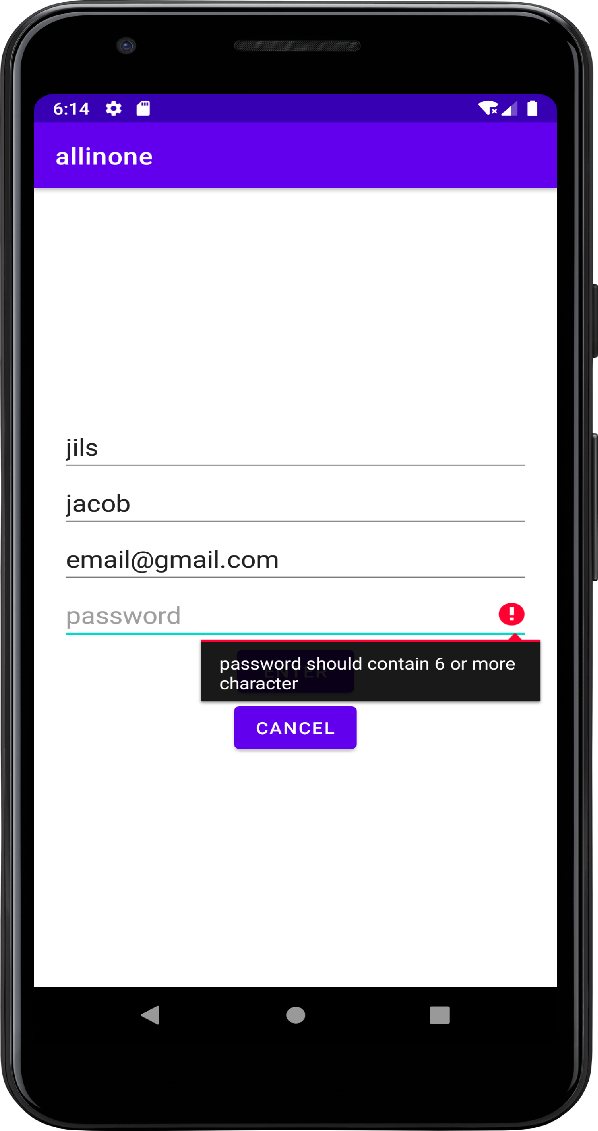
}

return true;

}

}

**OUTPUT:**

****

**PROGRAM NO:6**

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

**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"

tools:context=".explicit\_intent">

<TextView

android:id="@+id/textView3"

android:layout\_width="60dp"

android:layout\_height="17dp"

android:text="Name"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.091"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.222" />

<EditText

android:id="@+id/name"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:ems="10"

android:inputType="textPersonName"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.756"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.215" />

<TextView

android:id="@+id/textView4"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Email ID"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.096"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.325" />

<EditText

android:id="@+id/em"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:ems="10"

android:inputType="textPersonName"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.761"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.319" />

<TextView

android:id="@+id/textView5"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Phone No."

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.09"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.435" />

<EditText

android:id="@+id/ph"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:ems="10"

android:inputType="number"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.761"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.431" />

<Button

android:id="@+id/sav"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="SAVE"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.413"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.562" />

<TextView

android:id="@+id/textView6"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Enter Your Details"

android:textSize="25sp"

android:textStyle="bold"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.464"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.133" />

</androidx.constraintlayout.widget.ConstraintLayout>

**DISPLAY**

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

<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"

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

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".display">

<TextView

android:id="@+id/textView2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Your Details Using Intent"

android:textStyle="bold"

android:textSize="20sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.498"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.146" />

<TextView

android:id="@+id/dis"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:textStyle="italic"

android:textSize="15sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.498"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.233" />

<TextView

android:id="@+id/textView3"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Your Details Using Shared Preference"

android:textSize="20sp"

android:textStyle="bold"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.771"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.467" />

<TextView

android:id="@+id/dis1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:textSize="15sp"

android:textStyle="italic"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.527"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.571" />

</androidx.constraintlayout.widget.ConstraintLayout>

**JAVA CODE:**

package com.example.sharedpreference;

import androidx.appcompat.app.ActionBar;

import androidx.appcompat.app.AppCompatActivity;

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.TextView;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

ActionBar a=getSupportActionBar();

a.setTitle("Welcome");

Button sub=findViewById(R.id.sav);

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

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

EditText phone=findViewById(R.id.ph);

sub.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

Intent i=new Intent(MainActivity.this,display.class);

String user= nam.getText().toString();

i.putExtra("Name",user);

String E\_mail=email.getText().toString();

i.putExtra("Email",E\_mail);

String Phones=phone.getText().toString();

i.putExtra("Phone",Phones);

startActivity(i);

SharedPreferences sharedPreferences = getSharedPreferences("MySharedPref",MODE\_PRIVATE);

SharedPreferences.Editor myEdit = sharedPreferences.edit();

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

myEdit.putString("email", email.getText().toString());

myEdit.putString("phone", phone.getText().toString());

myEdit.apply();

}

});

}

}

**DISPLAY**

package com.example.sharedpreference;

import androidx.appcompat.app.ActionBar;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.content.SharedPreferences;

import android.os.Bundle;

import android.widget.TextView;

public class display extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_display);

ActionBar a=getSupportActionBar();

a.setTitle("Display");

TextView diss=findViewById(R.id.dis);

TextView diss1=findViewById(R.id.dis1);

Intent i=getIntent();

String name=i.getStringExtra("Name");

String email=i.getStringExtra("Email");

String phone=i.getStringExtra("Phone");

diss.setText("Name : "+name+"\nEmail : "+email+"\nPhone : "+phone);

SharedPreferences sharedPreferences = getSharedPreferences("MySharedPref",MODE\_PRIVATE);

String Name=sharedPreferences.getString("name","");

String Email=sharedPreferences.getString("email","");

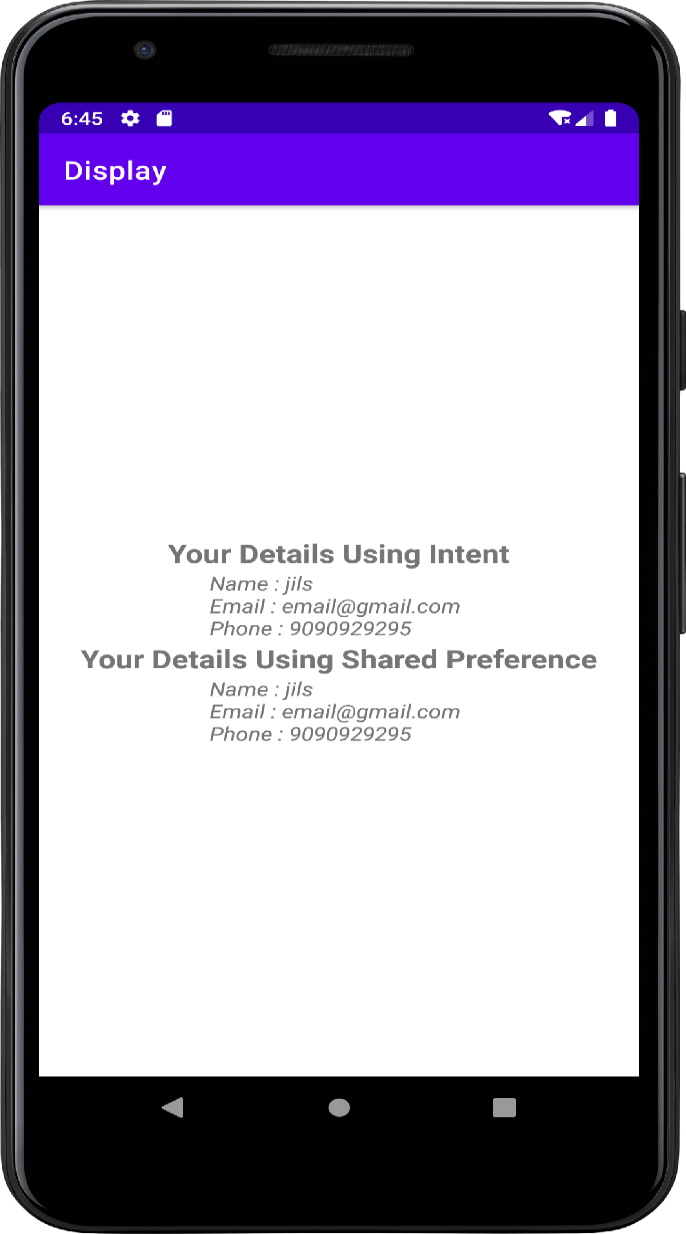
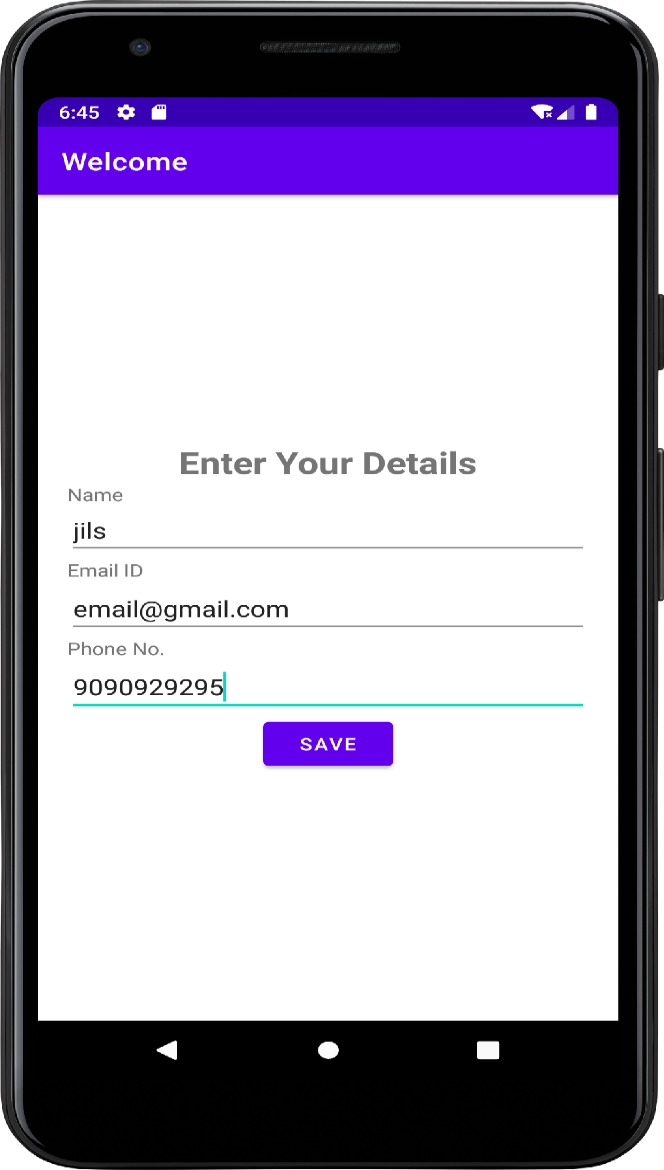
String Phone=sharedPreferences.getString("phone","");

diss1.setText("Name : "+Name+"\nEmail : "+Email+"\nPhone : "+Phone);

}

}

**OUTPUT:**



**PROGRAM NO:7**

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

**XML Code:**

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

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

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

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:background="#323030"

android:layout\_gravity="bottom"

android:gravity="bottom"

android:orientation="vertical"

tools:context=".MainActivity">

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:orientation="vertical">

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_gravity="end"

android:orientation="vertical">

<TextView

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginEnd="20dp"

android:text="9+10"

android:textAlignment="textEnd"

android:textColor="@color/white"

android:textSize="40dp" />

<TextView

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginEnd="20dp"

android:text="=19"

android:textAlignment="textEnd"

android:textColor="@color/white"

android:textSize="40dp" />

</LinearLayout>

<GridLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:layout\_weight="1"

android:columnCount="4"

android:gravity="bottom"

android:rowCount="4">

<Button

android:id="@+id/b9"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:background="@drawable/bg\_button"

android:text="9"

android:textColor="@color/white"

android:textSize="25dp" />

<Button

android:id="@+id/b8"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:background="@drawable/bg\_button"

android:text="8"

android:textColor="@color/white"

android:textSize="25dp" />

<Button

android:id="@+id/b7"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:background="@drawable/bg\_button"

android:text="7"

android:textColor="@color/white"

android:textSize="25dp" />

<Button

android:id="@+id/bmult"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:background="#F86605"

android:text="x"

android:textColor="@color/white"

android:textSize="18dp" />

<Button

android:id="@+id/b6"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:background="@drawable/bg\_button"

android:text="6"

android:textColor="@color/white"

android:textSize="25dp" />

<Button

android:id="@+id/b5"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:background="@drawable/bg\_button"

android:text="5"

android:textColor="@color/white"

android:textSize="25dp" />

<Button

android:id="@+id/b4"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:background="@drawable/bg\_button"

android:text="4"

android:textColor="@color/white"

android:textSize="25dp" />

<Button

android:id="@+id/bdiv"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:background="#F86605"

android:text="/"

android:textColor="@color/white"

android:textSize="25dp" />

<Button

android:id="@+id/b3"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:background="@drawable/bg\_button"

android:text="3"

android:textColor="@color/white"

android:textSize="25dp" />

<Button

android:id="@+id/b2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:background="@drawable/bg\_button"

android:text="2"

android:textColor="@color/white"

android:textSize="25dp" />

<Button

android:id="@+id/b1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:background="@drawable/bg\_button"

android:text="1"

android:textColor="@color/white"

android:textSize="25dp" />

<Button

android:id="@+id/bminus"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:background="#F86605"

android:text="-"

android:textColor="@color/white"

android:textSize="25dp" />

<Button

android:id="@+id/b0"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:background="@drawable/bg\_button"

android:text="0"

android:textColor="@color/white"

android:textSize="25dp" />

<Button

android:id="@+id/b."

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:background="@drawable/bg\_button"

android:text="."

android:textColor="@color/white"

android:textSize="25dp" />

<Button

android:id="@+id/bequal"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:background="@drawable/bg\_button"

android:text="="

android:textColor="@color/white"

android:textSize="25dp" />

<Button

android:id="@+id/bplus"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:background="#F86605"

android:text="+"

android:textColor="@color/white"

android:textSize="25dp" />

</GridLayout>

</LinearLayout>

</LinearLayout>

**JAVA CODE:**

package com.example.grid\_layout;

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:**



**PROGRAM NO:8**

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

**XML Code:**

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

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

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

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:background="@color/white"

tools:context=".MainActivity">

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:background="#29487D"

android:gravity="center|top"

android:orientation="vertical">

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginTop="70dp"

android:layout\_marginBottom="100dp"

android:orientation="vertical">

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:fontFamily="@font/fb"

android:text="facebook"

android:textSize="36dp"

android:padding="10dp"

android:textColor="@color/white" />

</LinearLayout>

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:padding="15dp"

android:orientation="vertical"

android:layout\_margin="20dp">

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:hint="Email or Phone"

android:layout\_marginBottom="30dp"

android:textColorHint="#594F4F"

android:background="@drawable/bg\_box"/>

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginBottom="30dp"

android:background="@drawable/bg\_box"

android:hint="password"

android:textColorHint="#594F4F"/>

<Button

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="Log In"

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

android:textAllCaps="false"/>

</LinearLayout>

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:orientation="horizontal"

android:layout\_marginTop="180dp"

android:layout\_gravity="bottom"

android:gravity="center">

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:gravity="end"

android:textStyle="bold"

android:textColor="@color/white"

android:layout\_marginRight="75dp"

android:layout\_weight="50"

android:text="SignUp for Facebook"/>

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:gravity="end"

android:textColor="@color/white"

android:layout\_marginEnd="50dp"

android:layout\_weight="1"

android:textStyle="bold"

android:text="?"/>

</LinearLayout>

</LinearLayout>

</LinearLayout>

**JAVA CODE:**

package com.example.facebook;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

public class MainActivity extends AppCompatActivity

{ @Override

protected void onCreate(Bundle savedInstanceState)

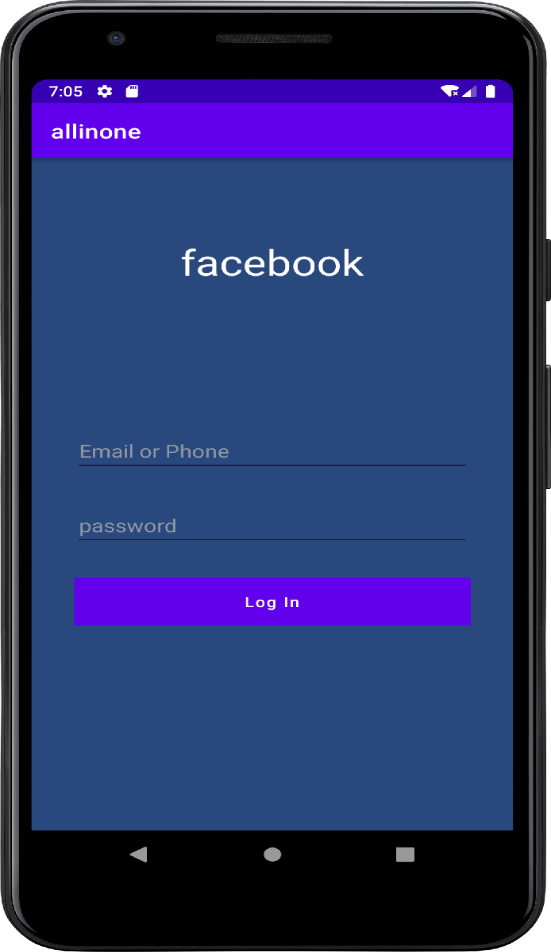
{ super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

getSupportActionBar().hide();

}}

**OUTPUT:**

****

**PROGRAM NO:9**

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

**XML Code:**

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

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

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:layout\_gravity="center"

android:background="@color/teal\_700"

tools:context=".MainActivity">

<ImageView

android:id="@+id/image2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_gravity="center"

android:src="@drawable/image2"

android:visibility="gone"/>

<ImageView

android:id="@+id/image1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_gravity="center"

android:src="@drawable/image1"/>

</FrameLayout>

**JAVA CODE:**

package com.example.frame\_layout;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.ImageView;

public class MainActivity extends AppCompatActivity implements View.OnClickListener {

ImageView img1,img2;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

img1 =findViewById(R.id.image1);

img2 =findViewById(R.id.image2);

img1.setOnClickListener(this);

img2.setOnClickListener(this);

}

public void onClick(View v)

{ int id=v.getId();

switch (id){

case R.id.image1:

img1.setVisibility(View.GONE);

img2.setVisibility(View.VISIBLE);

break;

case R.id.image2:

img1.setVisibility(View.VISIBLE);

img2.setVisibility(View.GONE);

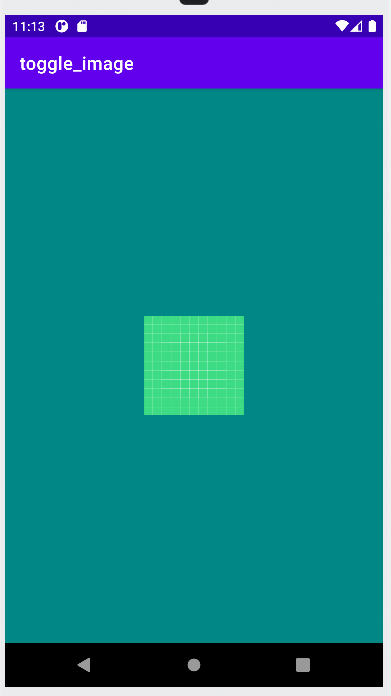
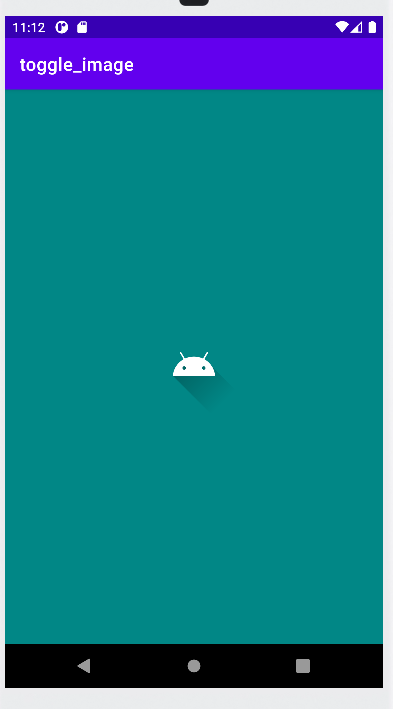
break;

}

}

}

**OUTPUT:**

****

**PROGRAM NO:10**

**Aim:** Implement Adapters and perform exception handling

**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"

tools:context=".MainActivity">

<ListView

android:layout\_width="409dp"

android:layout\_height="354dp"

tools:layout\_editor\_absoluteX="1dp"

tools:layout\_editor\_absoluteY="1dp"

android:id="@+id/list1"/>

</androidx.constraintlayout.widget.ConstraintLayout>

**JAVA CODE:**

package com.example.myadapter;

import androidx.appcompat.app.AppCompatActivity;

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;

public class MainActivity extends AppCompatActivity implements AdapterView.OnItemClickListener {

ListView l1;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

String[] cars = {"BMW", "BENZ", "AUDI"};

try {

ArrayAdapter<String> adapter = new ArrayAdapter<String>(this, R.layout.support\_simple\_spinner\_dropdown\_item, cars);

l1.setAdapter(adapter);

l1.setOnItemClickListener(this);

}

catch (Exception e)

{

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

}

}

@Override

public void onItemClick(AdapterView<?> adapterView, View view, int i, long l) {

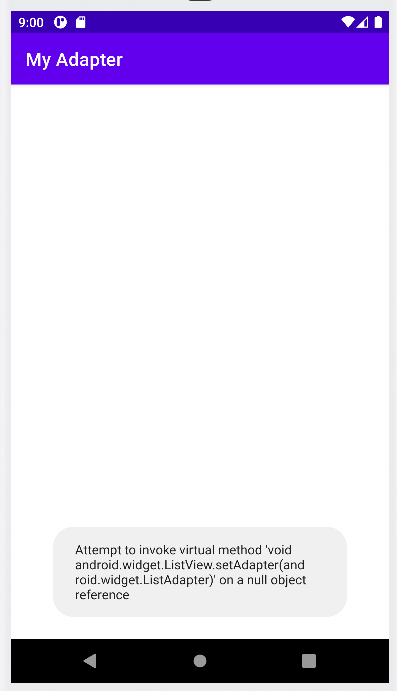
TextView tem=(TextView) view;

Toast.makeText(this, tem.getText(), Toast.LENGTH\_LONG).show();

}

}

**OUTPUT:**



**PROGRAM NO:11**

**Aim:** Implement Intent to navigate between multiple activities (Explicit Intent)

**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:onClick="callActivity"

tools:context=".MainActivity">

<EditText

android:id="@+id/name"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:ems="10"

android:hint="Name"

android:inputType="textPersonName"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.437"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.148" />

<EditText

android:id="@+id/address"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:ems="10"

android:hint="Address"

android:inputType="textPersonName"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.437"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.313" />

<EditText

android:id="@+id/email"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:ems="10"

android:hint="Email"

android:inputType="textPersonName"

android:onClick="callActivity"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.437"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.475" />

<Button

android:id="@+id/button"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Submit"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.454"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.609" />

</androidx.constraintlayout.widget.ConstraintLayout>

**Activity2**

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

<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"

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

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity2">

<TextView

android:id="@+id/view3"

android:layout\_width="189dp"

android:layout\_height="36dp"

android:textAlignment="center"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.459"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.398" />

<TextView

android:id="@+id/view1"

android:layout\_width="189dp"

android:layout\_height="36dp"

android:textAlignment="center"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.459"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.22" />

<TextView

android:id="@+id/view2"

android:layout\_width="189dp"

android:layout\_height="36dp"

android:textAlignment="center"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.459"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.306" />

</androidx.constraintlayout.widget.ConstraintLayout>

**JAVA CODE:**

package com.example.co\_q3;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

public class MainActivity extends AppCompatActivity {

Button b1;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

b1 = findViewById(R.id.button);

b1.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

callActivity(view);

}

});

}

public void callActivity(View view) {

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

final EditText editText1 = (EditText)findViewById(R.id.name);

String msg = editText1.getText().toString();

final EditText editText2 = (EditText)findViewById(R.id.address);

String add = editText2.getText().toString();

final EditText editText3 = (EditText)findViewById(R.id.email);

String em = editText3.getText().toString();

i.putExtra("Value1", msg);

i.putExtra("Value2", add);

i.putExtra("Value3", em);

startActivity(i);

}

}

**Activity 2**

package com.example.co\_q3;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.widget.TextView;

public class MainActivity2 extends AppCompatActivity {

TextView view1;

TextView view2;

TextView view3;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main2);

view1 = (TextView) findViewById(R.id.view1);

view2 = (TextView) findViewById(R.id.view2);

view3 = (TextView) findViewById(R.id.view3);

Bundle extras = getIntent().getExtras();

String value1 = extras.getString("Value1");

String value2 = extras.getString("Value2");

String value3 = extras.getString("Value3");

view1.setText(value1);

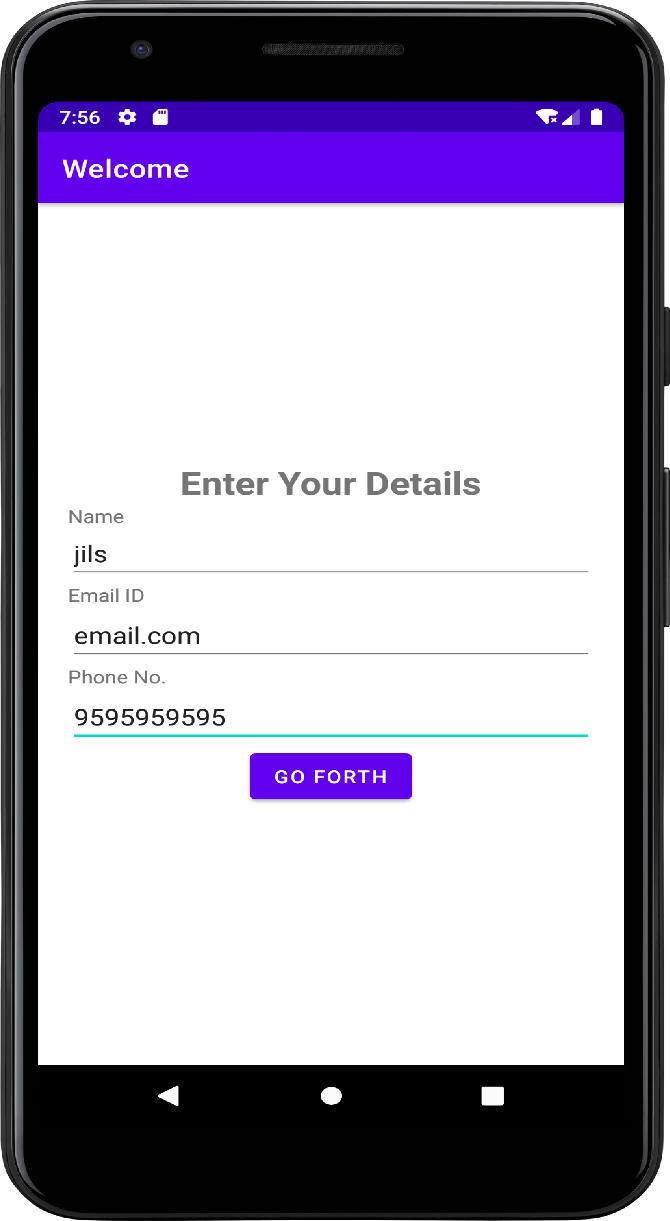
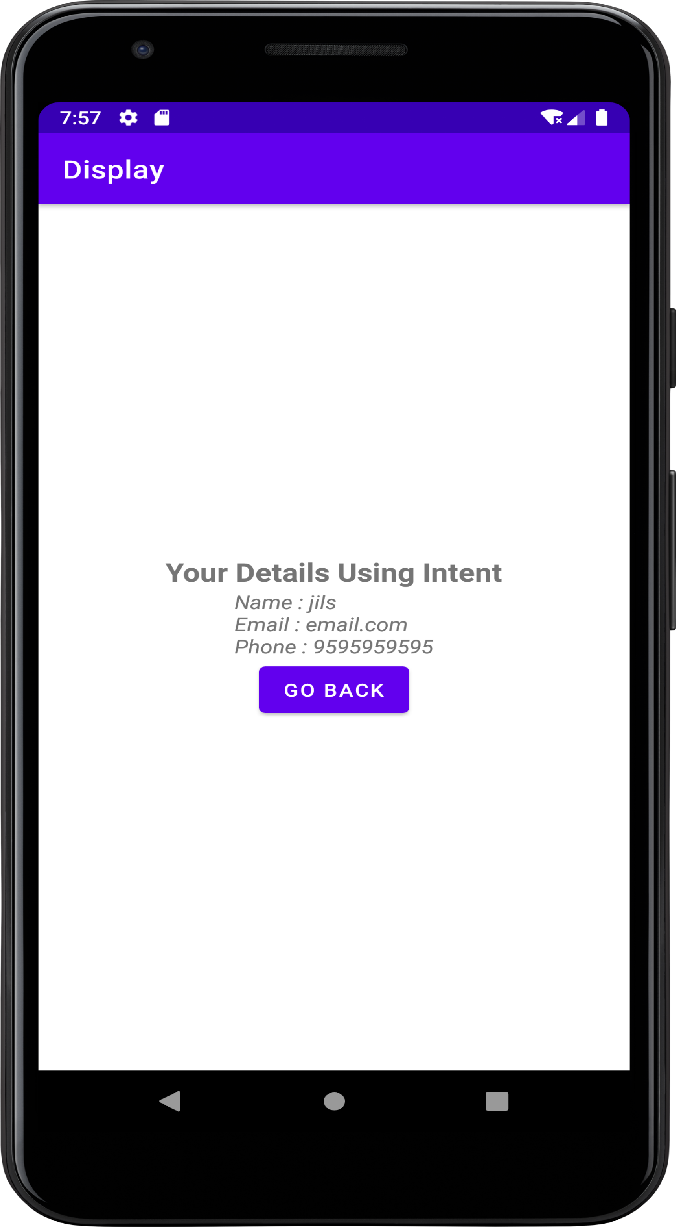
view2.setText(value2);

view3.setText(value3);

}

}

**OUTPUT:**

 ****

**PROGRAM NO:12**

**Aim:** Develop an application that works with Implicit intents

**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"

tools:context=".MainActivity">

<Button

android:id="@+id/cm"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="CLICK ME"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

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

</androidx.constraintlayout.widget.ConstraintLayout>

**JAVA CODE:**

package com.example.myapplication;

import androidx.appcompat.app.ActionBar;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.net.Uri;

import android.net.UrlQuerySanitizer;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

ActionBar b=getSupportActionBar();

b.setTitle("Go To Browser");

Button click=findViewById(R.id.cm);

click.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

Intent j=new Intent(Intent.ACTION\_VIEW, Uri.parse("https://www.google.com/"));

startActivity(j);

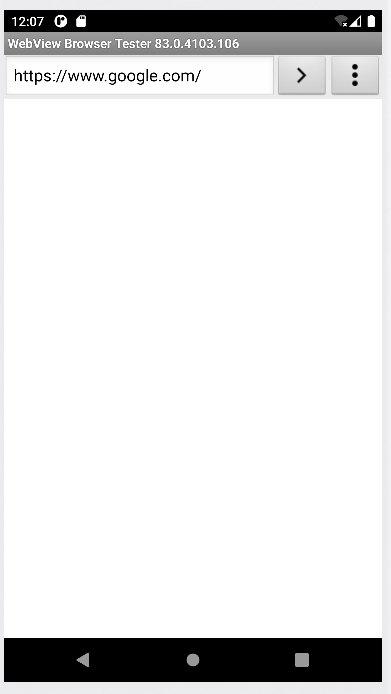
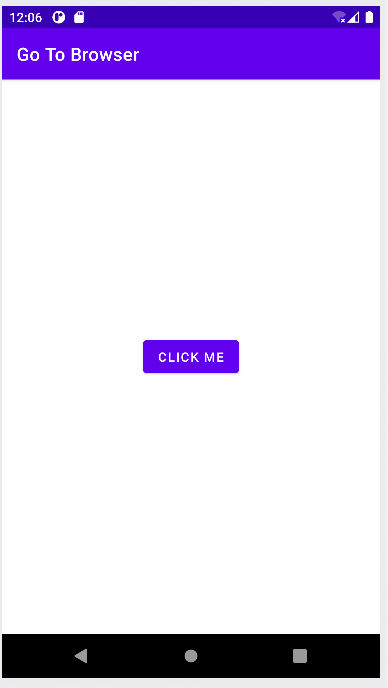
}

});

}

}

**OUTPUT:**

****

**PROGRAM NO:13**

**Aim:** Implement Options Menu to navigate to activities

**XML Code:**

<?xml version="1.0" encoding="utf-8"?>  
<menu xmlns:android="http://schemas.android.com/apk/res/android">  
 <item android:id="@+id/item1" android:title="about" android:icon="@drawable/download"/>  
 <item android:id="@+id/item2" android:title="help"/>  
</menu>

Activitymain.xml

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

<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"

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

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity">

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Hello World!"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintLeft\_toLeftOf="parent"

app:layout\_constraintRight\_toRightOf="parent"

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

</androidx.constraintlayout.widget.ConstraintLayout>

**JAVA CODE:**

package com.example.myapplication;

import androidx.appcompat.app.AppCompatActivity;

import android.annotation.SuppressLint;

import android.os.Bundle;

import android.view.Menu;

import android.view.MenuItem;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

}

@Override

public boolean onCreateOptionsMenu(Menu menu) {

getMenuInflater().inflate(R.menu.menuu, menu);

return true;

}

@Override

public boolean onOptionsItemSelected(MenuItem item){

switch (item.getItemId()){

case R.id.item1:

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

return true;

case R.id.item2:

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

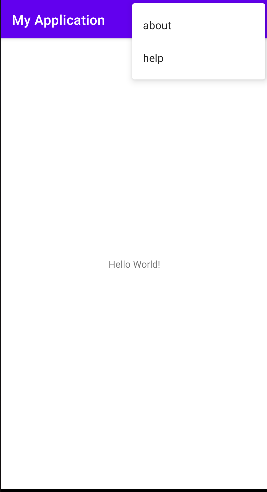
return true;

default:

return super.onOptionsItemSelected(item);

} }}

**OUTPUT:**



**PROGRAM NO:14**

**Aim:** Develop an application that uses ArrayAdapter with ListView

**XML Code:**

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

<androidx.constraintlayout.widget.ConstraintLayout

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

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

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity">

<ListView

android:id="@+id/mobile\_list"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content" >

</ListView>

</androidx.constraintlayout.widget.ConstraintLayout>

**JAVA CODE:**

package com.example.adapter;

import androidx.appcompat.app.AppCompatActivity;

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;

public class MainActivity extends AppCompatActivity implements AdapterView.OnItemClickListener {

ListView l;

String[] days={"Sunday","Monday","Tuesday","Wednesday","Thursday","Friday","Saturday"};

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

l=findViewById(R.id.mobile\_list);

ArrayAdapter<String> adapter= new ArrayAdapter<String>(this,R.layout.support\_simple\_spinner\_dropdown\_item,days);

l.setAdapter(adapter);

l.setOnItemClickListener(this);

}

@Override

public void onItemClick(AdapterView<?> adapterView, View view, int i, long l) {

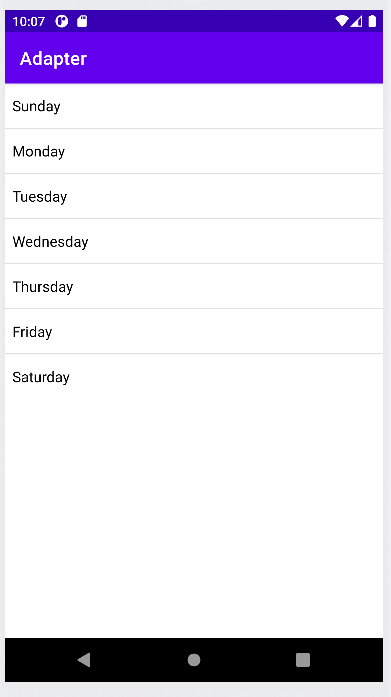
TextView temp=(TextView) view;

Toast.makeText(this,"You clicked"+temp.getText()+"at"+i,Toast.LENGTH\_LONG).show();

}

}

**OUTPUT:**

****

**PROGRAM NO:15**

**Aim:** Develop an application that use GridView with images and display Alert box on selection

**XML Code:**

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

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity" >

<GridView

android:numColumns="auto\_fit"

android:gravity="center"

android:columnWidth="100dp"

android:stretchMode="columnWidth"

android:layout\_width="fill\_parent"

android:layout\_height="fill\_parent"

android:id="@+id/grid"/>

</LinearLayout>

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

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

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:padding="5dp" >

<ImageView

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

android:layout\_width="50dp"

android:layout\_height="50dp">

</ImageView>

<TextView

android:id="@+id/grid\_text"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginTop="15dp"

android:textSize="9sp" >

</TextView>

</LinearLayout>

**JAVA CODE:**

package com.example.gridview\_image\_text\_example;

import android.content.Context;

import android.view.LayoutInflater;

import android.view.View;

import android.view.ViewGroup;

import android.widget.BaseAdapter;

import android.widget.ImageView;

import android.widget.TextView;

public class CustomGrid extends BaseAdapter{

private Context mContext;

private final String[] web;

private final int[] Imageid;

public CustomGrid(Context c,String[] web,int[] Imageid ) {

mContext = c;

this.Imageid = Imageid;

this.web = web;

}

@Override

public int getCount() {

// TODO Auto-generated method stub

return web.length;

}

@Override

public Object getItem(int position) {

// TODO Auto-generated method stub

return null;

}

@Override

public long getItemId(int position) {

return 0;

}

@Override

public View getView(int position, View convertView, ViewGroup parent) {

View grid;

LayoutInflater inflater = (LayoutInflater) mContext

.getSystemService(Context.LAYOUT\_INFLATER\_SERVICE);

if (convertView == null) {

grid = new View(mContext);

grid = inflater.inflate(R.layout.grid\_single, null);

TextView textView = (TextView) grid.findViewById(R.id.grid\_text);

ImageView imageView = (ImageView)grid.findViewById(R.id.grid\_image);

textView.setText(web[position]);

imageView.setImageResource(Imageid[position]);

} else {

grid = (View) convertView;

}

return grid;

}

}

package com.example.gridview\_image\_text\_example;

import android.os.Bundle;

import android.app.Activity;

import android.view.View;

import android.widget.AdapterView;

import android.widget.GridView;

import android.widget.Toast;

public class MainActivity extends Activity {

GridView grid;

String[] web = {

"Google",

"Github",

"Instagram",

"Facebook",

"Twitter",

"WordPress",

"Youtube",

"Whatsapp",

"Blogger"

} ;

int[] imageId = {

R.drawable.image1,

R.drawable.image2,

R.drawable.image3,

R.drawable.image4,

R.drawable.image5,

R.drawable.image6,

R.drawable.image7,

R.drawable.image8,

R.drawable.image9,

};

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

CustomGrid adapter = new CustomGrid(MainActivity.this, web, imageId);

grid=(GridView)findViewById(R.id.grid);

grid.setAdapter(adapter);

grid.setOnItemClickListener(new AdapterView.OnItemClickListener() {

@Override

public void onItemClick(AdapterView<?> parent, View view,

int position, long id) {

Toast.makeText(MainActivity.this, "You Clicked at " +web[+ position], Toast.LENGTH\_SHORT).show();

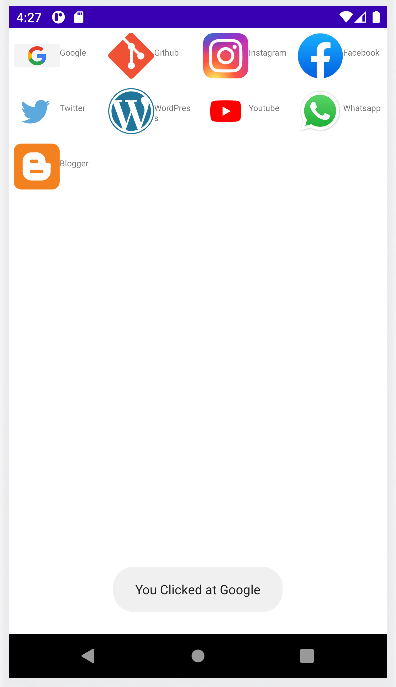
}

});

}

}

**OUTPUT:**

****

**PROGRAM NO:16**

**Aim:** Develop an application that implements Spinner component and perform event handling

**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"

tools:context=".MainActivity">

<Spinner

android:id="@+id/spinner"

android:layout\_height="50dp"

android:layout\_width="160dp"

android:layout\_marginEnd="10dp"

android:layout\_marginStart="10dp"

android:layout\_marginBottom="10dp" android:layout\_marginTop="10dp"

app:layout\_constraintStart\_toStartOf="parent"

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

</androidx.constraintlayout.widget.ConstraintLayout>

**JAVA CODE:**

package com.example.spinner;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.AdapterView;

import android.widget.ArrayAdapter;

import android.widget.Spinner;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity implements

AdapterView.OnItemSelectedListener {

String[] country = { "India", "USA", "China", "Japan", "Other"};

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

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

spin.setOnItemSelectedListener(this);

ArrayAdapter aa = new ArrayAdapter(this,android.R.layout.simple\_spinner\_item,country);

aa.setDropDownViewResource(android.R.layout.simple\_spinner\_dropdown\_item);

spin.setAdapter(aa);

}

@Override

public void onItemSelected(AdapterView<?> arg0, View arg1, int position, long id) {

Toast.makeText(getApplicationContext(),country[position] , Toast.LENGTH\_LONG).show();

}

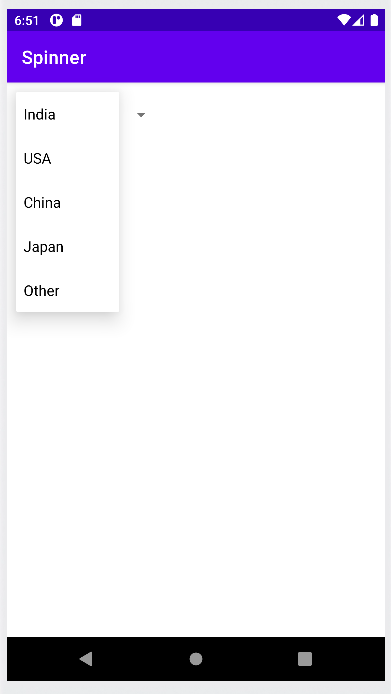
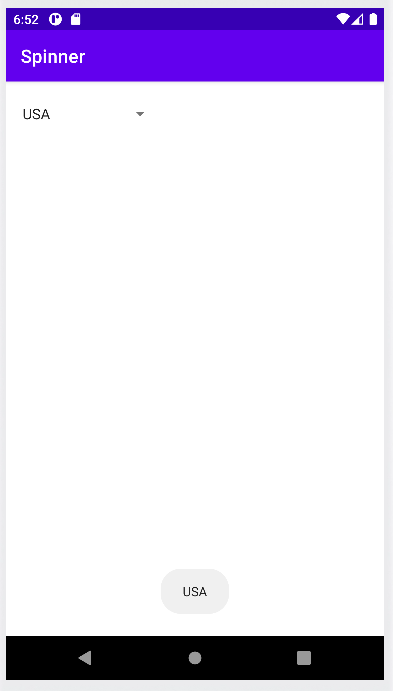
@Override

public void onNothingSelected(AdapterView<?> arg0) {

}

}

**OUTPUT:**

**** ****

**PROGRAM NO:17**

**Aim:** Apply themes via code and manifest file

**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"

tools:context=".MainActivity">

<EditText

android:id="@+id/editTextTextPersonName"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:ems="10"

android:inputType="textPersonName"

android:text="Name"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

tools:layout\_editor\_absoluteX="100dp" />

</androidx.constraintlayout.widget.ConstraintLayout>

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

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

package="com.example.themes">

<application

android:allowBackup="true"

android:icon="@mipmap/ic\_launcher"

android:label="@string/app\_name"

android:roundIcon="@mipmap/ic\_launcher\_round"

android:supportsRtl="true"

android:theme="@style/Theme.newstyle">

<activity

android:name=".MainActivity"

android:exported="true">

<intent-filter>

<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.LAUNCHER" />

</intent-filter>

</activity>

</application>

</manifest>

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

<resources>

<color name="teal">#FF018786</color>

<color name="black">#FF000000</color>

<color name="yellow">#EC971B</color>

<color name="red">#F80F0F</color>

</resources>

<resources xmlns:tools="http://schemas.android.com/tools">

<!-- Base application theme. -->

<style name="Theme.newstyle" parent="Theme.MaterialComponents.DayNight.DarkActionBar">

<item name="colorPrimary">@color/black</item>

<item name="colorPrimaryDark">@color/yellow</item>

<item name="colorAccent">@color/teal</item>

<item name="android:textColorPrimary">@color/red</item>

</style>

</resources>

**JAVA CODE:**

package com.example.themes;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

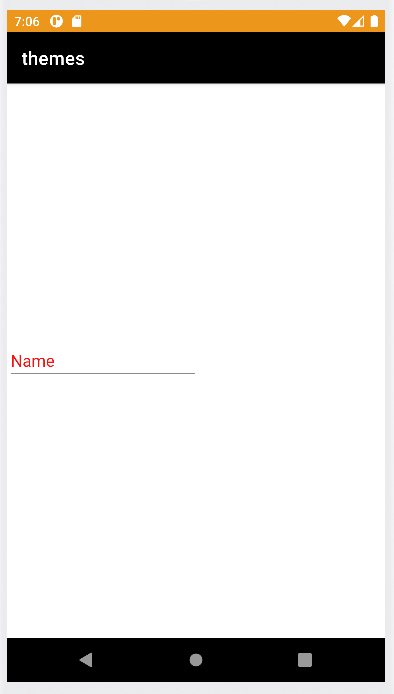
super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

}

}

**OUTPUT:**

****

**PROGRAM NO:18**

**Aim:** Develop application using Fragments

**XML Code:**

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

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

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

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:orientation="vertical"

tools:context=".MainActivity">

<RelativeLayout

android:layout\_width="match\_parent"

android:layout\_height="0dp"

android:layout\_weight="1">

<Button

android:id="@+id/b1"

android:layout\_width="160dp"

android:layout\_height="50dp"

android:layout\_alignParentBottom="true"

android:layout\_marginStart="30dp"

android:layout\_marginBottom="30dp"

android:backgroundTint="#2196F3"

android:text="Fragment1" />

<Button

android:id="@+id/b2"

android:layout\_width="160dp"

android:layout\_height="50dp"

android:layout\_alignParentRight="true"

android:layout\_alignParentBottom="true"

android:layout\_marginStart="30dp"

android:layout\_marginBottom="30dp"

android:backgroundTint="#FFC107"

android:text="Fragment2" />

</RelativeLayout>

<FrameLayout

android:id="@+id/frameLayout"

android:layout\_width="match\_parent"

android:layout\_height="0dp"

android:layout\_weight="4"

android:background="@color/purple\_200"/>

</LinearLayout>

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

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

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:background="@color/teal\_200"

tools:context=".Fragment1">

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_centerInParent="true"

android:background="#FFEB3B"

android:text="Fragment1"

android:textSize="30dp" />

</RelativeLayout>

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

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

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:background="#FFEB3B"

tools:context=".Fragment2">

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_centerInParent="true"

android:background="#FAA3C1"

android:text="Fragment2"

android:textSize="30dp" />

</RelativeLayout>

**JAVA CODE:**

package com.example.fragment;

import androidx.appcompat.app.AppCompatActivity;

import androidx.fragment.app.Fragment;

import androidx.fragment.app.FragmentManager;

import androidx.fragment.app.FragmentTransaction;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

public class MainActivity extends AppCompatActivity {

Button b1,b2;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

b1=findViewById(R.id.b1);

b2=findViewById(R.id.b2);

b1.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

replaceFragment(new Fragment1());

}

});

b2.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

replaceFragment(new Fragment2());

}

});

}

private void replaceFragment(Fragment fragment) {

FragmentManager fragmentManager=getSupportFragmentManager();

FragmentTransaction fragmentTransaction=fragmentManager.beginTransaction();

fragmentTransaction.replace(R.id.frameLayout,fragment);

fragmentTransaction.commit();

}}

package com.example.fragment;

import android.os.Bundle;

import androidx.fragment.app.Fragment;

import android.view.LayoutInflater;

import android.view.View;

import android.view.ViewGroup;

public class Fragment1 extends Fragment {

@Override

public View onCreateView(LayoutInflater inflater, ViewGroup container,

Bundle savedInstanceState) {

// Inflate the layout for this fragment

return inflater.inflate(R.layout.fragment\_1, container, false);

}

}

package com.example.fragment;

import android.os.Bundle;

import androidx.fragment.app.Fragment;

import android.view.LayoutInflater;

import android.view.View;

import android.view.ViewGroup;

public class Fragment2 extends Fragment {

@Override

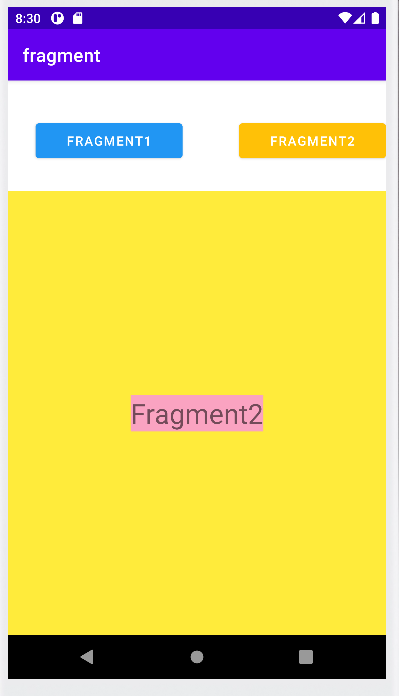
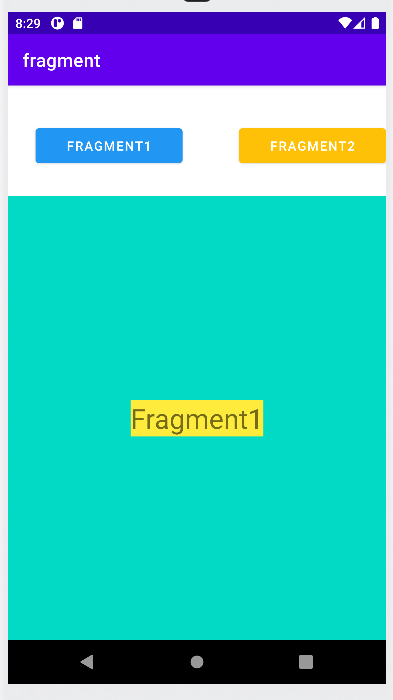
public View onCreateView(LayoutInflater inflater, ViewGroup container,

Bundle savedInstanceState) {

return inflater.inflate(R.layout.fragment\_2, container, false);

}

**OUTPUT:**

****

**PROGRAM NO:19**

**Aim:** Implement Navigation drawer

**XML Code:**

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

<androidx.drawerlayout.widget.DrawerLayout

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

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

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity"

android:id="@+id/drawer">

<LinearLayout

android:layout\_width="match\_parent"

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

<TextView

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:text="Welcome"

android:textSize="30dp">

</TextView>

</LinearLayout>

<com.google.android.material.navigation.NavigationView

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

app:menu="@menu/menu"

android:id="@+id/navigation\_view"

android:layout\_gravity="start">

</com.google.android.material.navigation.NavigationView>

</androidx.drawerlayout.widget.DrawerLayout>

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

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

<item

android:id="@+id/account"

android:title="My account"/>

<item

android:id="@+id/profile"

android:title="My profile"/>

<item

android:id="@+id/logout"

android:title="log out"/>

</menu>

**JAVA CODE:**

package com.example.navigation;

import androidx.annotation.NonNull;

import androidx.appcompat.app.ActionBarDrawerToggle;

import androidx.appcompat.app.AppCompatActivity;

import androidx.drawerlayout.widget.DrawerLayout;

import android.os.Bundle;

import android.view.MenuItem;

import android.widget.Toast;

import com.google.android.material.navigation.NavigationView;

public class MainActivity extends AppCompatActivity implements

NavigationView.OnNavigationItemSelectedListener {

public DrawerLayout drawerLayout;

public ActionBarDrawerToggle actionBarDrawerToggle;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

drawerLayout = findViewById(R.id.drawer);

actionBarDrawerToggle = new ActionBarDrawerToggle(this,drawerLayout, R.string.nav\_open, R.string.nav\_close);

drawerLayout.addDrawerListener(actionBarDrawerToggle);

actionBarDrawerToggle.syncState();

getSupportActionBar().setDisplayHomeAsUpEnabled(true);

NavigationView navigationView = findViewById(R.id.navigation\_view);

navigationView.setNavigationItemSelectedListener(this);

}

@Override

public boolean onOptionsItemSelected(@NonNull MenuItem item) {

if (actionBarDrawerToggle.onOptionsItemSelected(item)){

return true;

}

return super.onOptionsItemSelected(item);

}

@Override

public boolean onNavigationItemSelected(@NonNull MenuItem item) {

int id=item.getItemId();

if(id == R.id.account){

Toast.makeText(this, "Home Page", Toast.LENGTH\_SHORT).show();

}

if(id == R.id.profile){

Toast.makeText(this, "Settings Page",

Toast.LENGTH\_SHORT).show();

}

if(id == R.id.logout){

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

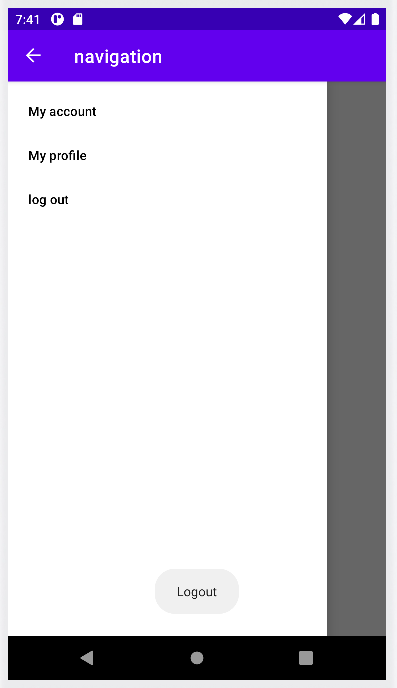
}

return false;

}

}

**OUTPUT:**



**PROGRAM NO:20**

**Aim :** Program to implement various SQLite operations : (INSERT, UPDATE ,DELETE ,SELECT)

**XML Code:**

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

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

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

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity"

android:orientation="vertical"

android:gravity="start"

android:padding="20dp">

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="First name"

android:textSize="20dp"/>

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/fname" />

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Last name"

android:textSize="20dp"/>

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/lname" />

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/insert"

android:text="Insert"

android:layout\_marginRight="3dp"/>

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/view"

android:text="view"

android:layout\_marginRight="3dp"/>

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/update"

android:text="update"

android:layout\_marginRight="3dp"/>

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/delete"

android:text="delete"/>

</LinearLayout>

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Id to update only"

android:textSize="20dp"/>

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/ids" />

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Datas"

android:id="@+id/display"

android:textSize="20dp"/>

</LinearLayout>

**JAVA CODE:**

package com.example.database;

import androidx.appcompat.app.AppCompatActivity;

import android.database.Cursor;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

TextView display1;

EditText fname1,lname1,id;

Button insert,update,view,delete;

databasess db1=new databasess(this);

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

display1=findViewById(R.id.display);

fname1=findViewById(R.id.fname);

lname1=findViewById(R.id.lname);

id=findViewById(R.id.ids);

insert=findViewById(R.id.insert);

update=findViewById(R.id.update);

view=findViewById(R.id.view);

delete=findViewById(R.id.delete);

insert.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

String sfname = fname1.getText().toString();

String slname = lname1.getText().toString();

db1.insertuserdata(sfname,slname);

fname1.setText("");

lname1.setText("");

}

});

update.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

String sfname = fname1.getText().toString();

String slname = lname1.getText().toString();

String sid = id.getText().toString();

db1.updateuserdata(sfname,slname,sid);

fname1.setText("");

lname1.setText("");

id.setText("");

}

});

delete.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

String sid = id.getText().toString();

db1.deletedata(sid);

id.setText("");

}

});

view.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

StringBuffer sb=new StringBuffer();

Cursor cu=db1.getdata();

while(cu.moveToNext()){

sb.append("Id :"+cu.getString(0)+"\n");

sb.append("First Name : "+cu.getString(1)+"\n");

sb.append("Last Name : "+cu.getString(2)+"\n");

}

display1.setText(sb.toString());

}

});

}

}

**Activity 2:**

package com.example.database;

import android.content.ContentValues;

import android.content.Context;

import android.database.Cursor;

import android.database.sqlite.SQLiteDatabase;

import android.database.sqlite.SQLiteOpenHelper;

import androidx.annotation.Nullable;

public class databasess extends SQLiteOpenHelper {

int ids=0;

public databasess(@Nullable Context context) {

super(context, "jils", null, 1);

}

@Override

public void onCreate(SQLiteDatabase db) {

db.execSQL("create table names (id integer primary key autoincrement,fname Text ,lname Text)");

}

@Override

public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {

db.execSQL("Drop table if Exists names");

}

public Cursor getdata (){

SQLiteDatabase DB=this.getWritableDatabase();

Cursor cursor=DB.rawQuery("Select \* from names",null);

return cursor;

}

public Boolean insertuserdata(String fnames, String lnames){

SQLiteDatabase database = this.getWritableDatabase();

ContentValues contentValues = new ContentValues();

contentValues.put("fname",fnames);

contentValues.put("lname",lnames);

long result=database.insert("names", null, contentValues);

if(result==-1){

return false;

}

else

{

return true;

}

}

public Boolean updateuserdata(String fnames, String lnames,String ids) {

SQLiteDatabase database = this.getWritableDatabase();

ContentValues contentValues = new ContentValues();

contentValues.put("fname", fnames);

contentValues.put("lname", lnames);

Cursor cursor = database.rawQuery("Select \* from names where id=?", new String[]{ids});

if (cursor.getCount() > 0) {

long result = database.update("names", contentValues, "id=?", new String[]{ids});

if (result == -1) {

return false;

} else {

return true;

}

} else {

return false;

}

}

public Boolean deletedata(String ids){

SQLiteDatabase database = this.getWritableDatabase();

Cursor cursors = database.rawQuery("Select \* from names where id=?", new String[]{ids});

if (cursors.getCount() > 0) {

long result = database.delete("names", "id=?", new String[]{ids});

if (result == -1) {

return false;

}

else {

return true;

}

}

else {

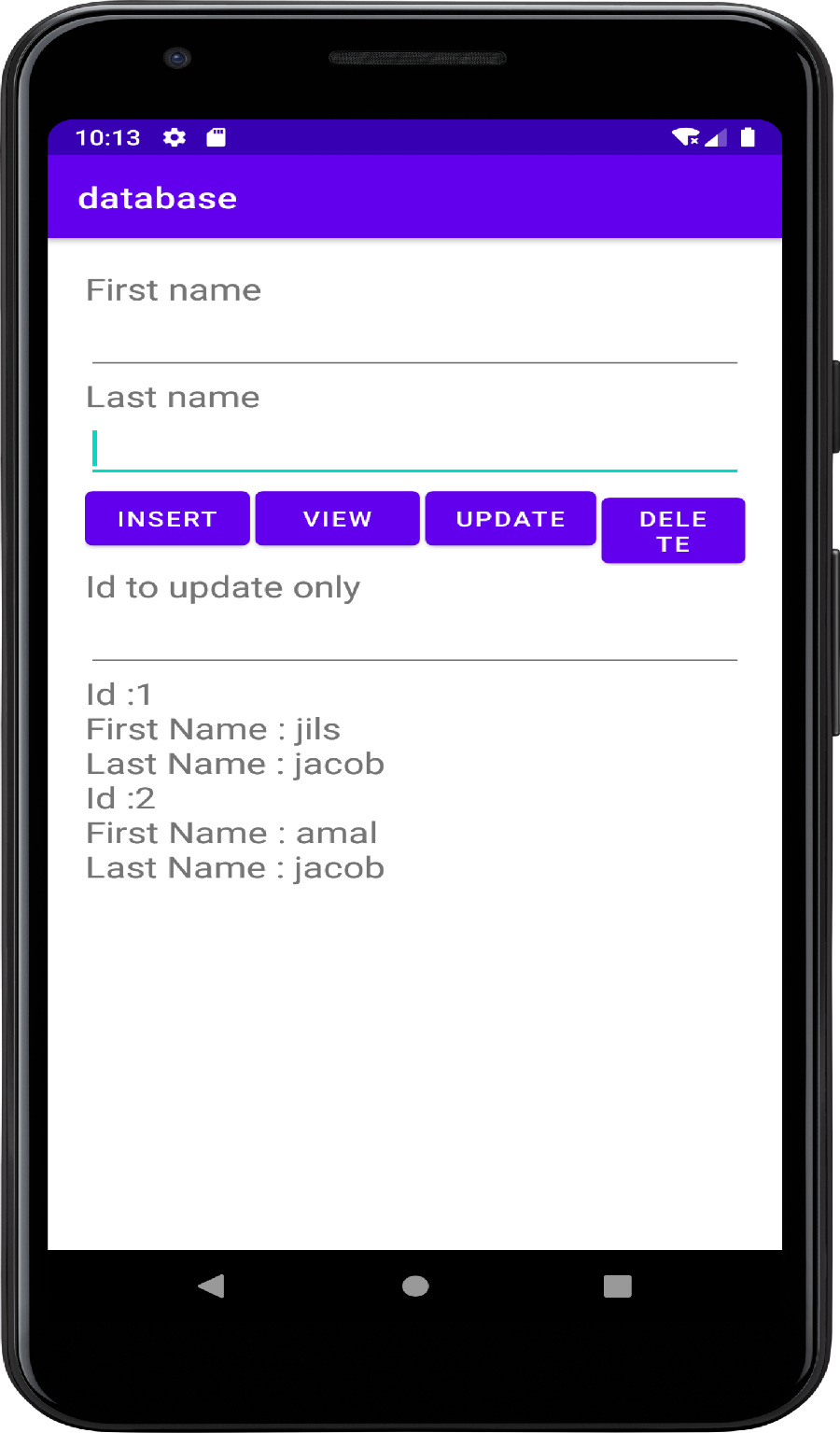
return false;

}

}

}

**Output:**

****