**Practical 9**

1. Write a program to create 2 toggle buttons and on the click of the button it should display which button is pressed.

Code :

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

<AbsoluteLayout 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">

<ToggleButton

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:textOn="ON"

android:textOff="OFF"

android:textColor="@color/black"

android:textSize="50dp"

android:layout\_x="50dp"

android:layout\_y="70dp"

android:id="@+id/tbtn1"

/>

<ToggleButton

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:textOn="ON"

android:textOff="OFF"

android:textColor="@color/black"

android:textSize="50dp"

android:layout\_x="250dp"

android:layout\_y="70dp"

android:id="@+id/tbtn2"

/>

<Button

android:id="@+id/nor\_btn"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="SUBMIT"

android:textSize="30dp"

android:backgroundTint="@color/black"

android:layout\_y="250dp"

android:layout\_x="130dp"

/>

</AbsoluteLayout>

Java Code :

package com.example.myapplication;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.Toast;

import android.widget.ToggleButton;

public class MainActivity extends AppCompatActivity {

ToggleButton b1,b2;

Button btn;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

btn = (Button) findViewById(R.id.nor\_btn);

b1 = (ToggleButton) findViewById(R.id.tbtn1);

b2 = (ToggleButton) findViewById(R.id.tbtn2);

btn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

Toast.makeText(getApplicationContext(), "State of Toggle Button 1 : "+b1.getText()+"\n"+"State of Toggle Button 2 : "+b2.getText(), Toast.LENGTH\_SHORT).show();

Graphical user interface, application

Description automatically generatedGraphical user interface, text, application

Description automatically generated }

});

}

}

Output :

1. Write a program to create a toggle button to display the ON/OFF Bluetooth on the display screen.

Code:

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

<AbsoluteLayout 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:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Bluetooth"

android:textSize="45dp"

android:textColor="@color/black"

android:layout\_x="35dp"

android:layout\_y="60dp"

/>

<ToggleButton

android:id="@+id/tglbtn"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:textOn="ON"

android:textOff="OFF"

android:textSize="35dp"

android:layout\_y="60dp"

android:layout\_x="260dp"

/>

</AbsoluteLayout>

Java Code :

package com.example.myapplication;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.widget.CompoundButton;

import android.widget.Toast;

import android.widget.ToggleButton;

public class MainActivity2 extends AppCompatActivity {

ToggleButton btn;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main2);

btn = (ToggleButton) findViewById(R.id.tglbtn);

btn.setOnCheckedChangeListener(new CompoundButton.OnCheckedChangeListener() {

@Override

public void onCheckedChanged(CompoundButton compoundButton, boolean b) {

if(btn.isChecked()){

Toast.makeText(getApplicationContext(), "Bluetooth is enabled", Toast.LENGTH\_SHORT).show();

}

else{

Toast.makeText(getApplicationContext(), "Bluetooth is disabled", Toast.LENGTH\_SHORT).show();

}}

});}}

Output:

Graphical user interface, application

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1. Write a program to create one rounded corner image button and one normal image button and on the click of the button it should display which button is pressed.

Code:

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

<AbsoluteLayout 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=".MainActivity3">

<ImageButton

android:id="@+id/insta"

android:layout\_width="200dp"

android:layout\_height="200dp"

android:layout\_x="100dp"

android:layout\_y="70dp"

android:src="@drawable/img"

android:scaleType="fitCenter"

android:background="@drawable/round"

/>

<ImageButton

android:id="@+id/face"

android:layout\_width="200dp"

android:layout\_height="200dp"

android:src="@drawable/img\_1"

android:layout\_x="100dp"

android:layout\_y="340dp"

android:background="@drawable/normal"

android:scaleType="fitCenter"

/>

</AbsoluteLayout>

Java Code :

package com.example.myapplication;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.ImageButton;

import android.widget.Toast;

public class MainActivity3 extends AppCompatActivity {

ImageButton b1,b2;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main3);

b1 = (ImageButton) findViewById(R.id.insta);

b2 = (ImageButton) findViewById(R.id.face);

b1.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

Toast.makeText(getApplicationContext(), "You have selected Instagram", Toast.LENGTH\_SHORT).show();

}

});

b2.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

Toast.makeText(getApplicationContext(), "You have selected Facebook", Toast.LENGTH\_SHORT).show();

}

});

}}

Round.xml Code :

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

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

<solid android:color="#ffff" />

<stroke android:width="7dp"/>

<corners android:radius="30dp"/>

<padding android:left="15dp" android:top="15dp" android:right="15dp" android:bottom="15dp" />

</shape>

Normal.xml Code :

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

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

<solid android:color="#ffff" />

<stroke android:width="7dp"/>

<padding android:left="10dp" android:top="10dp" android:right="10dp" android:bottom="10dp" />

</shape>

Output:

Graphical user interface, text

Description automatically generated Graphical user interface, application, Word

Description automatically generated

1. Write a program to make 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:orientation="vertical"

>

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginTop="30dp"

android:text="Calculator app"

android:textSize="50dp"

android:gravity="center"

android:textColor="#000000"

android:fontFamily="cursive"

android:textStyle="bold"

android:layout\_gravity="center"

/>

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:hint="Enter 1st number"

android:layout\_marginTop="40dp"

android:layout\_marginLeft="20dp"

android:layout\_marginRight="20dp"

android:textColor="@color/black"

android:textSize="20dp"

android:id="@+id/num1"

/>

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:hint="Enter 2nd number"

android:layout\_marginTop="15dp"

android:layout\_marginLeft="20dp"

android:layout\_marginRight="20dp"

android:textColor="@color/black"

android:textSize="20dp"

android:id="@+id/num2"

/>

<LinearLayout

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

>

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Result : "

android:textSize="35dp"

android:layout\_marginTop="20dp"

android:textColor="@color/black"

android:textStyle="bold"

android:layout\_marginLeft="100dp"

/>

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text=""

android:textSize="35dp"

android:layout\_marginTop="20dp"

android:textColor="@color/black"

android:textStyle="bold"

android:id="@+id/result"

/>

</LinearLayout>

<Button

android:layout\_width="match\_parent"

android:layout\_height="60dp"

android:textSize="20dp"

android:text="Addition"

android:layout\_marginTop="30dp"

android:backgroundTint="@color/black"

android:layout\_marginLeft="20dp"

android:layout\_marginRight="20dp"

android:id="@+id/add"

/>

<Button

android:layout\_width="match\_parent"

android:layout\_height="60dp"

android:textSize="20dp"

android:text="Substraction"

android:layout\_marginTop="5dp"

android:backgroundTint="@color/black"

android:layout\_marginLeft="20dp"

android:layout\_marginRight="20dp"

android:id="@+id/sub"

/>

<Button

android:layout\_width="match\_parent"

android:layout\_height="60dp"

android:textSize="20dp"

android:text="Multiplication"

android:layout\_marginTop="5dp"

android:backgroundTint="@color/black"

android:layout\_marginLeft="20dp"

android:layout\_marginRight="20dp"

android:id="@+id/mul"

/>

<Button

android:layout\_width="match\_parent"

android:layout\_height="60dp"

android:textSize="20dp"

android:text="Division"

android:layout\_marginTop="5dp"

android:backgroundTint="@color/black"

android:layout\_marginLeft="20dp"

android:layout\_marginRight="20dp"

android:id="@+id/div"

/>

<Button

android:layout\_width="match\_parent"

android:layout\_height="60dp"

android:textSize="20dp"

android:text="Modulus"

android:layout\_marginTop="5dp"

android:backgroundTint="@color/black"

android:layout\_marginLeft="20dp"

android:layout\_marginRight="20dp"

android:id="@+id/mod"

/>

</LinearLayout>

Java Code:

package com.example.mycalulator;

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 {

Button b1,b2,b3,b4,b5;

EditText n1,n2;

TextView finalresult;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

n1 = findViewById(R.id.num1);

n2 = findViewById(R.id.num2);

finalresult = findViewById(R.id.result);

b1 = findViewById(R.id.add);

b2 = findViewById(R.id.sub);

b3 = findViewById(R.id.mul);

b4 = findViewById(R.id.div);

b5 = findViewById(R.id.mod);

b1.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

int a = Integer.parseInt(n1.getText().toString());

int b = Integer.parseInt(n2.getText().toString());

int sum = a+b;

finalresult.setText(Integer.toString(sum));

}

});

b2.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

int a = Integer.parseInt(n1.getText().toString());

int b = Integer.parseInt(n2.getText().toString());

int sub = a-b;

finalresult.setText(Integer.toString(sub));

}

});

b3.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

int a = Integer.parseInt(n1.getText().toString());

int b = Integer.parseInt(n2.getText().toString());

int mul = a\*b;

finalresult.setText(Integer.toString(mul));

}

});

b4.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

int a = Integer.parseInt(n1.getText().toString());

int b = Integer.parseInt(n2.getText().toString());

int div = a/b;

finalresult.setText(Integer.toString(div));

}

});

b5.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

int a = Integer.parseInt(n1.getText().toString());

int b = Integer.parseInt(n2.getText().toString());

int mod = a%b;

finalresult.setText(Integer.toString(mod));

}

});

}

}

Output :

Graphical user interface, application

Description automatically generated Graphical user interface, application

Description automatically generated