**Task 01: Implement Simple calculator**

**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:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:orientation="vertical"

tools:context=".MainActivity">

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="0dp"

android:layout\_weight="2"

android:orientation="horizontal">

<EditText

android:id="@+id/edtText"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:background="#87cefa"

android:gravity="end"

android:hint="|"

android:textAppearance="@style/Base.TextAppearance.AppCompat.Large"

tools:fontFamily="@font/krona\_one" />

</LinearLayout>

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="0dp"

android:layout\_weight="1"

android:orientation="horizontal">

<Button

android:id="@+id/btn9"

android:layout\_width="0dp"

android:layout\_height="match\_parent"

android:layout\_weight="1"

android:text="9"

android:textStyle="italic|bold"

android:fontFamily="@font/krona\_one"

android:textAppearance="@style/Base.TextAppearance.AppCompat.Medium"

android:onClick="onNineClick"

/>

<Button

android:id="@+id/btn8"

android:layout\_width="0dp"

android:layout\_height="match\_parent"

android:layout\_weight="1"

android:text="8"

android:textStyle="italic|bold"

android:fontFamily="@font/krona\_one"

android:textAppearance="@style/Base.TextAppearance.AppCompat.Medium"

android:onClick="onEightClick"

/>

<Button

android:id="@+id/btn7"

android:layout\_width="0dp"

android:layout\_height="match\_parent"

android:layout\_weight="1"

android:text="7"

android:textStyle="italic|bold"

android:fontFamily="@font/krona\_one"

android:textAppearance="@style/Base.TextAppearance.AppCompat.Medium"

android:onClick="onSevenClick"

/>

<ImageButton

android:id="@+id/btnDivide"

android:layout\_width="0dp"

android:layout\_height="match\_parent"

android:layout\_weight="1"

android:src="@drawable/divide"

android:onClick="onDivideClick"

/>

</LinearLayout>

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="0dp"

android:layout\_weight="1"

android:orientation="horizontal">

<Button

android:id="@+id/btn6"

android:layout\_width="0dp"

android:layout\_height="match\_parent"

android:layout\_weight="1"

android:text="6"

android:textStyle="italic|bold"

android:fontFamily="@font/krona\_one"

android:textAppearance="@style/Base.TextAppearance.AppCompat.Medium"

android:onClick="onSixClick"

/>

<Button

android:id="@+id/btn5"

android:layout\_width="0dp"

android:layout\_height="match\_parent"

android:layout\_weight="1"

android:text="5"

android:textStyle="italic|bold"

android:fontFamily="@font/krona\_one"

android:textAppearance="@style/Base.TextAppearance.AppCompat.Medium"

android:onClick="onFiveClick"

/>

<Button

android:id="@+id/btn4"

android:layout\_width="0dp"

android:layout\_height="match\_parent"

android:layout\_weight="1"

android:text="4"

android:textStyle="italic|bold"

android:fontFamily="@font/krona\_one"

android:textAppearance="@style/Base.TextAppearance.AppCompat.Medium"

android:onClick="onFourClick"

/>

<ImageButton

android:id="@+id/btnMultiply"

android:layout\_width="0dp"

android:layout\_height="match\_parent"

android:layout\_weight="1"

android:src="@drawable/multiply"

android:onClick="onMultiplyClick"

/>

</LinearLayout>

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="0dp"

android:layout\_weight="1"

android:orientation="horizontal">

<Button

android:id="@+id/btn3"

android:layout\_width="0dp"

android:layout\_height="match\_parent"

android:layout\_weight="1"

android:text="3"

android:textStyle="italic|bold"

android:fontFamily="@font/krona\_one"

android:textAppearance="@style/Base.TextAppearance.AppCompat.Medium"

android:onClick="onThreeClick"

/>

<Button

android:id="@+id/btn2"

android:layout\_width="0dp"

android:layout\_height="match\_parent"

android:layout\_weight="1"

android:text="2"

android:textStyle="italic|bold"

android:fontFamily="@font/krona\_one"

android:textAppearance="@style/Base.TextAppearance.AppCompat.Medium"

android:onClick="onTwoClick"

/>

<Button

android:id="@+id/btn1"

android:layout\_width="0dp"

android:layout\_height="match\_parent"

android:layout\_weight="1"

android:text="1"

android:textStyle="italic|bold"

android:fontFamily="@font/krona\_one"

android:textAppearance="@style/Base.TextAppearance.AppCompat.Medium"

android:onClick="onOneClick"

/>

<ImageButton

android:id="@+id/btnSubtract"

android:layout\_width="0dp"

android:layout\_height="match\_parent"

android:layout\_weight="1"

android:src="@drawable/subtract"

android:onClick="onSubtractClick"

/>

</LinearLayout>

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="0dp"

android:layout\_weight="1"

android:orientation="horizontal">

<Button

android:id="@+id/btnC"

android:layout\_width="0dp"

android:layout\_height="match\_parent"

android:layout\_weight="1"

android:text="C"

android:textStyle="italic|bold"

android:fontFamily="@font/krona\_one"

android:textAppearance="@style/Base.TextAppearance.AppCompat.Medium"

android:onClick="onCancelClick"

/>

<Button

android:id="@+id/btn0"

android:layout\_width="0dp"

android:layout\_height="match\_parent"

android:layout\_weight="1"

android:text="0"

android:textStyle="italic|bold"

android:fontFamily="@font/krona\_one"

android:textAppearance="@style/Base.TextAppearance.AppCompat.Medium"

android:onClick="onZeroClick"

/>

<ImageButton

android:id="@+id/btnEquals"

android:layout\_width="0dp"

android:layout\_height="match\_parent"

android:layout\_weight="1"

android:src="@drawable/equals"

android:onClick="onEqualsClick"

/>

<ImageButton

android:id="@+id/btnAdd"

android:layout\_width="0dp"

android:layout\_height="match\_parent"

android:layout\_weight="1"

android:src="@drawable/add"

android:onClick="onAddClick"

/>

</LinearLayout>

</LinearLayout>

**JAVA:**

import android.annotation.SuppressLint;

import android.support.v7.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.ImageButton;

import static java.lang.Float.parseFloat;

public class MainActivity extends AppCompatActivity {

Button btn0,btn1,btn2,btn3,btn4,btn5,btn6,btn7,btn8,btn9,btnC;

ImageButton btnMultiply, btnDivide, btnAdd, btnSubtract, btnEquals;

EditText edtTxt;

float val1,val2, result;

Boolean mul,div,add,sub;

String output;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

btn0 = (Button) findViewById(R.id.btn0);

btn1 = (Button) findViewById(R.id.btn1);

btn2 = (Button) findViewById(R.id.btn2);

btn3 = (Button) findViewById(R.id.btn3);

btn4 = (Button) findViewById(R.id.btn4);

btn5 = (Button) findViewById(R.id.btn5);

btn6 = (Button) findViewById(R.id.btn6);

btn7 = (Button) findViewById(R.id.btn7);

btn8 = (Button) findViewById(R.id.btn8);

btn9 = (Button) findViewById(R.id.btn9);

btnC = (Button) findViewById(R.id.btnC);

btnMultiply = (ImageButton) findViewById(R.id.btnMultiply);

btnDivide = (ImageButton) findViewById(R.id.btnDivide);

btnAdd = (ImageButton) findViewById(R.id.btnAdd);

btnSubtract = (ImageButton) findViewById(R.id.btnSubtract);

btnEquals = (ImageButton) findViewById(R.id.btnEquals);

edtTxt=(EditText) findViewById(R.id.edtText);

}

public void onZeroClick(View v){

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

}

public void onOneClick(View v){

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

}

public void onTwoClick(View v){

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

}

public void onThreeClick(View v){

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

}

public void onFourClick(View v){

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

}

public void onFiveClick(View v){

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

}

public void onSixClick(View v){

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

}

public void onSevenClick(View v){

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

}

public void onEightClick(View v){

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

}

public void onNineClick(View v){

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

}

public void onMultiplyClick(View v){

if(edtTxt==null){

edtTxt.setText("");

}

else{

val1= Float.parseFloat(edtTxt.getText() + "");

mul=true;

edtTxt.setText(null);

}

}

public void onDivideClick(View v){

if(edtTxt==null){

edtTxt.setText("");

}

else{

val1= Float.parseFloat(edtTxt.getText().toString());

div=true;

edtTxt.setText(null);

}

}

public void onAddClick(View v){

if(edtTxt==null){

edtTxt.setText("");

}

else{

val1= Float.parseFloat(edtTxt.getText().toString());

add=true;

edtTxt.setText(null);

}

}

public void onSubtractClick(View v){

if(edtTxt==null){

edtTxt.setText("");

}

else{

val1=Float.parseFloat(edtTxt.getText().toString());

sub=true;

edtTxt.setText(null);

}

}

@SuppressLint("SetTextI18n")

public void onEqualsClick(View v){

val2=Float.parseFloat(edtTxt.getText().toString());

if(add==true){

result=val1+val2;

edtTxt.setText(Float.toString(result));

add=false;

}

if(sub==true){

result=val1-val2;

edtTxt.setText(result + "");

sub=false;

}

if(mul==true){

result=val1\*val2;

edtTxt.setText(result + "");

mul=false;

}

if(div==true){

result=val1/val2;

edtTxt.setText(result + "");

div=false;

}

}

public void onCancelClick(View v){

edtTxt.setText("");

}

}

