**ANDROID LAB**

**Experiment No.: 2**

**Aim**

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

**Program**

------------------------------------------------------------- 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:gravity="center"

android:orientation="vertical"

android:padding="20dp"

tools:context=".ArithmeticCalculatorQues03Activity">

<EditText

android:id="@+id/number1"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:inputType="numberDecimal"

android:hint="Enter Number 01"/>

<EditText

android:id="@+id/number2"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:inputType="numberDecimal"

android:layout\_marginTop="10dp"

android:hint="Enter Number 02"/>

<TextView

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

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="20dp"

android:textStyle="bold"

android:textColor="@color/black"

android:textSize="17sp"/>

<Button

android:id="@+id/add\_btn"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="10dp"

android:text="+" />

<Button

android:id="@+id/sub\_btn"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="10dp"

android:text="-" />

<Button

android:id="@+id/mul\_btn"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="10dp"

android:text="x" />

<Button

android:id="@+id/div\_btn"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="10dp"

android:text="/" />

<Button

android:id="@+id/clear\_btn"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="10dp"

android:text="clear" />

</LinearLayout>

------------------------------------------------------------- Java Code -------------------------------------------------------------

package com.example.loginformques01;

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 ArithmeticCalculatorQues03Activity extends AppCompatActivity {

EditText number1, number2;

TextView result\_text;

Button add\_btn, sub\_btn, mul\_btn, div\_btn, clear\_btn;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_arithmetic\_calculator\_ques03);

number1= findViewById(R.id.number1);

number2= findViewById(R.id.number2);

result\_text= findViewById(R.id.result\_text);

add\_btn= findViewById(R.id.add\_btn);

sub\_btn= findViewById(R.id.sub\_btn);

mul\_btn= findViewById(R.id.mul\_btn);

div\_btn= findViewById(R.id.div\_btn);

clear\_btn= findViewById(R.id.clear\_btn);

add\_btn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

String number1\_text= number1.getText().toString();

String number2\_text= number2.getText().toString();

int num1= Integer.parseInt(number1\_text);

int num2= Integer.parseInt(number2\_text);

float sum= num1+num2;

result\_text.setText("The addition of the two numbers is : "+sum);

}

});

sub\_btn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

String number1\_text= number1.getText().toString();

String number2\_text= number2.getText().toString();

int num1= Integer.parseInt(number1\_text);

int num2= Integer.parseInt(number2\_text);

float sub= num1-num2;

result\_text.setText("The substraction of the two numbers is : "+sub);

}

});

mul\_btn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

String number1\_text= number1.getText().toString();

String number2\_text= number2.getText().toString();

int num1= Integer.parseInt(number1\_text);

int num2= Integer.parseInt(number2\_text);

float mul= num1\*num2;

result\_text.setText("The multiplication of the two numbers is : "+mul);

}

});

div\_btn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

String number1\_text= number1.getText().toString();

String number2\_text= number2.getText().toString();

int num1= Integer.parseInt(number1\_text);

int num2= Integer.parseInt(number2\_text);

float div= num1/num2;

result\_text.setText("The division of the two numbers is : "+div);

}

});

clear\_btn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

number1.setText("");

number2.setText("");

}

});

}

}