Program No. : 5

**AIM : Android application for implementing a basic calculator.**

activity\_main.xml

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

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:orientation="vertical">

<EditText

android:id="@+id/fno"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:hint="Enter First Number"

android:inputType="number"

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

<EditText

android:id="@+id/sno"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:hint="Enter Second Number"

android:inputType="number"

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

<androidx.appcompat.widget.AppCompatButton

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="+"

android:id="@+id/add"

android:layout\_margin="10dp"

android:background="@color/cardview\_dark\_background"

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

<androidx.appcompat.widget.AppCompatButton

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="-"

android:id="@+id/sub"

android:layout\_margin="10dp"

android:background="@color/cardview\_dark\_background"

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

<androidx.appcompat.widget.AppCompatButton

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="/"

android:id="@+id/div"

android:layout\_margin="10dp"

android:background="@color/cardview\_dark\_background"

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

<androidx.appcompat.widget.AppCompatButton

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="\*"

android:id="@+id/mult"

android:layout\_margin="10dp"

android:background="@color/cardview\_dark\_background"

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

<androidx.appcompat.widget.AppCompatButton

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="Clear"

android:id="@+id/clear"

android:background="@color/cardview\_dark\_background"

android:layout\_margin="10dp" />

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_margin="10dp"

android:hint="result"

android:id="@+id/res"

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

</LinearLayout>

MainActivity.java

package com.example.calc;

import androidx.appcompat.app.AppCompatActivity;

import androidx.appcompat.widget.AppCompatButton;

import android.os.Bundle;

import android.view.View;

import android.widget.EditText;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity

{

EditText ed1,ed2,ed3;

AppCompatButton b1,b2,b3,b4,b5;

@Override

protected void onCreate(Bundle savedInstanceState)

{

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

ed1=(EditText) findViewById(R.id.fno);

ed2=(EditText) findViewById(R.id.sno);

ed3=(EditText) findViewById(R.id.res);

b1=(AppCompatButton) findViewById(R.id.add);

b2=(AppCompatButton) findViewById(R.id.sub);

b3=(AppCompatButton) findViewById(R.id.div);

b4=(AppCompatButton) findViewById(R.id.mult);

b5=(AppCompatButton) findViewById(R.id.clear);

b1.setOnClickListener(new View.OnClickListener()

{

@Override

public void onClick(View v)

{

if (ed1.getText().length()>0 && (ed2.getText().length()>0))

{

int first=Integer.parseInt(ed1.getText().toString());

int second=Integer.parseInt(ed2.getText().toString());

int result=first+second;

ed3.setText(Integer.toString(result));

}

}

});

b2.setOnClickListener(new View.OnClickListener()

{

@Override

public void onClick(View v)

{

if (ed1.getText().length()>0 && (ed2.getText().length()>0))

{

double first=Double.parseDouble(ed1.getText().toString());

double second=Double.parseDouble(ed2.getText().toString());

double result=first -second;

ed3.setText(Double.toString(result));

}

}

});

b3.setOnClickListener(new View.OnClickListener()

{

@Override

public void onClick(View v)

{

if (ed1.getText().length()>0 && (ed2.getText().length()>0))

{

double first=Double.parseDouble(ed1.getText().toString());

double second=Double.parseDouble(ed2.getText().toString());

double result=first/second;

ed3.setText(Double.toString(result));

}

}

});

b4.setOnClickListener(new View.OnClickListener()

{

@Override

public void onClick(View v)

{

if (ed1.getText().length()>0 && (ed2.getText().length()>0));

{

double first=Double.parseDouble(ed1.getText().toString());

double second=Double.parseDouble(ed2.getText().toString());

double result=first\*second;

ed3.setText(Double.toString(result));

}

}

});

b5.setOnClickListener(new View.OnClickListener()

{

@Override

public void onClick(View v)

{

ed1.setText(" ");

ed2.setText(" ");

ed3.setText(" ");

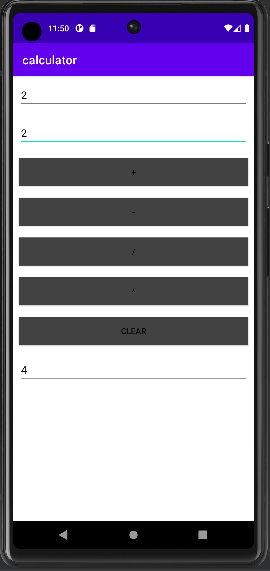
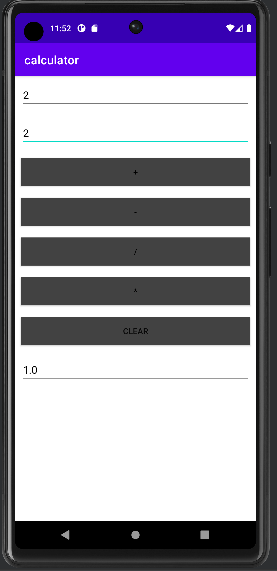
}

});

}

}

Output

 ]

