**active\_main.xml**

**<LinearLayout android:layout\_width="match\_parent"**

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

**android:padding="20dp"**

**android:orientation="vertical"**

**android:background="@color/colorPrimaryDark"**

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

**<TextView**

**android:layout\_width="wrap\_content"**

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

**android:text="CALCULATOR"**

**android:textSize="25dp"/>**

**<LinearLayout**

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

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

**android:orientation="horizontal"**

**android:layout\_marginBottom="20dp">**

**<EditText**

**android:id="@+id/first\_number"**

**android:layout\_width="102dp"**

**android:layout\_height="58dp"**

**android:ems="10"**

**android:hint="Enter"/>**

**<EditText**

**android:id="@+id/second\_number"**

**android:layout\_width="102dp"**

**android:layout\_height="58dp"**

**android:ems="10"**

**android:hint="Enter"/>**

**</LinearLayout>**

**<LinearLayout**

**android:layout\_width="wrap\_content"**

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

**android:orientation="horizontal">**

**<TextView**

**android:id="@+id/Answer"**

**android:layout\_width="102dp"**

**android:layout\_height="58dp"**

**android:hint="ans"/>**

**</LinearLayout>**

**<LinearLayout**

**android:orientation="vertical"**

**android:layout\_width="wrap\_content"**

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

**android:layout\_marginBottom="16dp">**

**<Button**

**android:id="@+id/add"**

**android:layout\_width="wrap\_content"**

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

**android:text="+"/>**

**<Button**

**android:id="@+id/subtract"**

**android:layout\_width="wrap\_content"**

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

**android:layout\_marginBottom="16dp"**

**android:text="-"/>**

**<Button**

**android:id="@+id/divide"**

**android:layout\_width="wrap\_content"**

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

**android:text="/"**

**android:layout\_marginBottom="16dp"/>**

**<Button**

**android:id="@+id/multiply"**

**android:layout\_width="wrap\_content"**

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

**android:text="x"**

**/>**

**<Button**

**android:id="@+id/Equals"**

**android:layout\_width="wrap\_content"**

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

**android:text="="/>**

**</LinearLayout>**

**</LinearLayout>**

**MainActivity.java**

**package** com.example.sjcet.demo5;

**import** android.os.Bundle;

**import** android.view.View;

**import** android.support.v7.app.AppCompatActivity;

**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; *// global variable*

@Override

**protected void** onCreate(Bundle savedInstanceState) {

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

*// for text views*

**no1** = findViewById(R.id.***first\_number***);

**no2** = findViewById(R.id.***second\_number***);

*// for button with operations*

**add** = findViewById(R.id.***add***);

**mul** = findViewById(R.id.***multiply***);

**div** = findViewById(R.id.***divide***);

**sub** = findViewById(R.id.***subtract***);

*// 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;

}

});

}

}