

## Experiment-3

Implementing basic arithmetic operations of a simple calculator

### CODE

#### Activity\_Main..xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    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">

    <Button
        android:id="@+id/btadd"
        android:layout_width="65dp"
        android:layout_height="45dp"
        android:layout_marginStart="36dp"
        android:layout_marginEnd="281dp"
        android:layout_marginBottom="360dp"
        android:onClick="add"
        android:text="ADD"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.034"
        app:layout_constraintStart_toStartOf="parent" />

    <Button
        android:id="@+id/btsub"
        android:layout_width="65dp"
        android:layout_height="45dp"
        android:layout_marginStart="4dp"
        android:layout_marginEnd="182dp"
        android:layout_marginBottom="360dp"
        android:onClick="sub"
        android:text="SUB"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.275"
        app:layout_constraintStart_toEndOf="@+id/btadd" />

    <Button
        android:id="@+id/btdiv"
        android:layout_width="65dp"
        android:layout_height="45dp"
        android:layout_marginStart="5dp"
        android:layout_marginEnd="82dp"
        android:layout_marginBottom="360dp"
        android:onClick="div"
        android:text="DIV"
```

```

app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.349"
app:layout_constraintStart_toEndOf="@+id/btsub" />

<Button
    android:id="@+id/btmul"
    android:layout_width="65dp"
    android:layout_height="45dp"
    android:layout_marginStart="5dp"
    android:layout_marginEnd="8dp"
    android:layout_marginBottom="360dp"
    android:onClick="mul"
    android:text="MUL"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.361"
    app:layout_constraintStart_toEndOf="@+id/btdiv" />

<EditText
    android:id="@+id/etnum1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="105dp"
    android:layout_marginTop="57dp"
    android:layout_marginEnd="96dp"
    android:layout_marginBottom="34dp"
    android:ems="10"
    android:hint="Enter num1"
    android:inputType="textPersonName"
    app:layout_constraintBottom_toTopOf="@+id/etnum2"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />

<EditText
    android:id="@+id/etnum2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="107dp"
    android:layout_marginTop="34dp"
    android:layout_marginEnd="94dp"
    android:layout_marginBottom="145dp"
    android:ems="10"
    android:hint="Enter num2"
    android:inputType="textPersonName"
    app:layout_constraintBottom_toTopOf="@+id/btsub"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/etnum1" />

<TextView
    android:id="@+id/etans"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="177dp"

```

```

        android:layout_marginTop="119dp"
        android:layout_marginEnd="176dp"
        android:layout_marginBottom="222dp"
        android:text="Result"
        android:textSize="30dp"
        android:textColor="@color/black"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/btsub" />

```

```
</androidx.constraintlayout.widget.ConstraintLayout>
```

### Activity\_Main.java

```

package com.example.simplecalculatorapp;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.EditText;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {
    private EditText etnum1,etnum2;
    private TextView etans;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
    public void add(View V){
        etnum1=(EditText) findViewById(R.id.etnum1);
        etnum2=(EditText) findViewById(R.id.etnum2);
        etans=(TextView) findViewById(R.id.etans);

        int n1=Integer.parseInt(etnum1.getText().toString());
        int n2=Integer.parseInt(etnum2.getText().toString());

        int result=n1+n2;
        etans.setText("Result:"+result);
    }
    public void sub(View V){
        etnum1=(EditText) findViewById(R.id.etnum1);
        etnum2=(EditText) findViewById(R.id.etnum2);
        etans=(TextView) findViewById(R.id.etans);

        int n1=Integer.parseInt(etnum1.getText().toString());
        int n2=Integer.parseInt(etnum2.getText().toString());

        int result=n1-n2;
        etans.setText("Result:"+result);
    }
}

```

```

public void div(View V){
    etnum1=(EditText) findViewById(R.id.etnum1);
    etnum2=(EditText) findViewById(R.id.etnum2);
    etans=(TextView) findViewById(R.id.etans);

    int n1=Integer.parseInt(etnum1.getText().toString());
    int n2=Integer.parseInt(etnum2.getText().toString());

    int result=n1/n2;
    etans.setText("Result:"+result);
}
public void mul(View V){
    etnum1=(EditText) findViewById(R.id.etnum1);
    etnum2=(EditText) findViewById(R.id.etnum2);
    etans=(TextView) findViewById(R.id.etans);

    int n1=Integer.parseInt(etnum1.getText().toString());
    int n2=Integer.parseInt(etnum2.getText().toString());

    int result=n1*n2;
    etans.setText("Result:"+result);
}
}

```

## OUTPUT

