

```
<?xml version="1.0" encoding="utf-8"?>
```

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

```
    android:layout_width="match_parent"
```

```
    android:layout_height="match_parent"
```

```
    android:orientation="vertical"
```

```
    android:padding="20dp"
```

```
    android:gravity="center">
```

```
    <EditText
```

```
        android:id="@+id/num1"
```

```
        android:layout_width="match_parent"
```

```
        android:layout_height="wrap_content"
```

```
        android:hint="Enter First Number"
```

```
        android:inputType="numberDecimal"
```

```
        android:padding="10dp"/>
```

```
    <EditText
```

```
        android:id="@+id/num2"
```

```
        android:layout_width="match_parent"
```

```
        android:layout_height="wrap_content"
```

```
        android:hint="Enter Second Number"
```

```
        android:inputType="numberDecimal"
```

```
        android:padding="10dp"/>
```

```
</LinearLayout
```

```
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:orientation="horizontal"
android:gravity="center">
```

```
<Button
```

```
    android:id="@+id/addButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Add"/>
```

```
<Button
```

```
    android:id="@+id/subtractButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Subtract"/>
```

```
<Button
```

```
    android:id="@+id/multiplyButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Multiply"/>
```

```
<Button
```

```
    android:id="@+id/divideButton"
```

```
    android:layout_width="wrap_content"
```

```
    android:layout_height="wrap_content"
```

```
    android:text="Divide"/>
```

```
</LinearLayout>
```

```
<TextView
```

```
    android:id="@+id/resultText"
```

```
    android:layout_width="wrap_content"
```

```
    android:layout_height="wrap_content"
```

```
    android:text="Result: "
```

```
    android:textSize="20sp"
```

```
    android:textStyle="bold"
```

```
    android:layout_marginTop="20dp"/>
```

```
</LinearLayout>
```

```
package com.example.calculatorapp;
```

```
import android.os.Bundle;
```

```
import android.view.View;
```

```
import android.widget.Button;
```

```
import android.widget.EditText;
```

```
import android.widget.TextView;
```

```
import android.widget.Toast;
```

```
import androidx.appcompat.app.AppCompatActivity;
```

```
public class MainActivity extends AppCompatActivity {
```

@Override

```
protected void onCreate(Bundle savedInstanceState) {  
  
    super.onCreate(savedInstanceState);  
  
    setContentView(R.layout.activity_main);  
  
    EditText num1 = findViewById(R.id.num1);  
  
    EditText num2 = findViewById(R.id.num2);  
  
    Button addButton = findViewById(R.id.addButton);  
  
    Button subtractButton = findViewById(R.id.subtractButton);  
  
    Button multiplyButton = findViewById(R.id.multiplyButton);  
  
    Button divideButton = findViewById(R.id.divideButton);  
  
    TextView resultText = findViewById(R.id.resultText);  
  
    View.OnClickListener operationListener = new View.OnClickListener() {  
  
        @Override  
  
        public void onClick(View v) {  
  
            String input1 = num1.getText().toString();  
  
            String input2 = num2.getText().toString();  
  
            if (input1.isEmpty() || input2.isEmpty()) {  
  
                Toast.makeText(MainActivity.this, "Please enter both numbers",  
Toast.LENGTH_SHORT).show();  
  
                return;  
  
            }  
  
            double number1 = Double.parseDouble(input1);
```

```
double number2 = Double.parseDouble(input2);

double result = 0;

switch (v.getId()) {

    case R.id.addButton:

        result = number1 + number2;

        break;

    case R.id.subtractButton:

        result = number1 - number2;

        break;

    case R.id.multiplyButton:

        result = number1 * number2;

        break;

    case R.id.divideButton:

        if (number2 == 0) {

            Toast.makeText(MainActivity.this, "Cannot divide by zero",
Toast.LENGTH_SHORT).show();

            return;

        }

        result = number1 / number2;

        break;

}

resultText.setText("Result: " + result);
```

```
}
```

```
};
```

```
addButton.setOnClickListener(operationListener);
```

```
subtractButton.setOnClickListener(operationListener);
```

```
multiplyButton.setOnClickListener(operationListener);
```

```
divideButton.setOnClickListener(operationListener);
```

```
}
```

```
}
```