

## Activity main.java-

```
package com.example.calculator;

import androidx.appcompat.app.AppCompatActivity;

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

public class MainActivity extends AppCompatActivity {
    static double result;
    static char op;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        {
            final EditText e = (EditText) findViewById(R.id.et);
            Button b1 = (Button) findViewById(R.id.b1);
            Button b2 = (Button) findViewById(R.id.b2);
            Button b3 = (Button) findViewById(R.id.b3);
            Button b4 = (Button) findViewById(R.id.b4);
            Button b5 = (Button) findViewById(R.id.b5);
            Button b6 = (Button) findViewById(R.id.b6);
            Button b7 = (Button) findViewById(R.id.b7);
            Button b8 = (Button) findViewById(R.id.b8);
            Button b9 = (Button) findViewById(R.id.b9);
            Button b0 = (Button) findViewById(R.id.b0);
            Button be = (Button) findViewById(R.id.be);
            Button bp = (Button) findViewById(R.id.bp);
            Button bs = (Button) findViewById(R.id.bs);
            Button bm = (Button) findViewById(R.id.bm);
            Button bd = (Button) findViewById(R.id.bd);
            Button bc = (Button) findViewById(R.id.bc);

            b0.setOnClickListener(new View.OnClickListener() {
                public void onClick(View v) {
                    e.setText(e.getText() + "0");
                }
            });

            b1.setOnClickListener(new View.OnClickListener() {
                public void onClick(View v) {
                    e.setText(e.getText() + "1");
                }
            });

            b2.setOnClickListener(new View.OnClickListener() {
                public void onClick(View v) {
                    e.setText(e.getText() + "2");
                }
            });

            b3.setOnClickListener(new View.OnClickListener() {
                public void onClick(View v) {
                    e.setText(e.getText() + "3");
                }
            });

            b4.setOnClickListener(new View.OnClickListener() {
                public void onClick(View v) {
                    e.setText(e.getText() + "4");
                }
            });
        }
    }
}
```

```
b5.setOnClickListener(new View.OnClickListener() {
    public void onClick(View v) {
        e.setText(e.getText() + "5");
    }
});
b6.setOnClickListener(new View.OnClickListener() {
    public void onClick(View v) {
        e.setText(e.getText() + "6");
    }
});
b7.setOnClickListener(new View.OnClickListener() {
    public void onClick(View v) {
        e.setText(e.getText() + "7");
    }
});
b8.setOnClickListener(new View.OnClickListener() {
    public void onClick(View v) {
        e.setText(e.getText() + "8");
    }
});
b9.setOnClickListener(new View.OnClickListener() {
    public void onClick(View v) {
        e.setText(e.getText() + "9");
    }
});
bc.setOnClickListener(new View.OnClickListener() {
    public void onClick(View v) {
        e.setText("");
    }
});
bp.setOnClickListener(new View.OnClickListener() {
    public void onClick(View v) {
        op = '+';
        result = Double.parseDouble(e.getText().toString());
        e.setText("");
    }
});
bs.setOnClickListener(new View.OnClickListener() {
    public void onClick(View v) {
        op = '-';
        result = Double.parseDouble(e.getText().toString());
        e.setText(String.valueOf(""));
    }
});
bm.setOnClickListener(new View.OnClickListener() {
    public void onClick(View v) {
        op = '*';
        result = Double.parseDouble(e.getText().toString());
        e.setText(String.valueOf(""));
    }
});
bd.setOnClickListener(new View.OnClickListener() {
    public void onClick(View v) {
        op = '/';
        result = Double.parseDouble(e.getText().toString());
        e.setText(String.valueOf(""));
    }
});
be.setOnClickListener(new View.OnClickListener() {
    public void onClick(View v) {
        if (op == '+') {
            double n = Double.parseDouble(e.getText().toString());
            e.setText(String.valueOf(result + n));
        } else if (op == '-') {
            double n = Double.parseDouble(e.getText().toString());
```

```
        e.setText(String.valueOf(result - n));
    } else if (op == '*') {
        double n = Double.parseDouble(e.getText().toString());
        e.setText(String.valueOf(result * n));
    } else {
        double n = Double.parseDouble(e.getText().toString());
        e.setText(String.valueOf(result / n));
    }
}

});
}

}
```

## 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/bc"
        android:layout_width="65dp"
        android:layout_height="65dp"
        android:text="c"
        android:textAppearance="@style/TextAppearance.AppCompat.Display1"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toStartOf="@+id/b0"
        app:layout_constraintHorizontal_bias="0.5"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/b7" />

    <Button
        android:id="@+id/bd"
        android:layout_width="65dp"
        android:layout_height="65dp"
        android:text="/"
        android:textAppearance="@style/TextAppearance.AppCompat.Display1"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.5"
        app:layout_constraintStart_toEndOf="@+id/be"
        app:layout_constraintTop_toBottomOf="@+id/bm" />

    <Button
        android:id="@+id/be"
        android:layout_width="65dp"
        android:layout_height="65dp"
        android:text="="
        android:textAppearance="@style/TextAppearance.AppCompat.Display1"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toStartOf="@+id/bd"
        app:layout_constraintHorizontal_bias="0.5"
        app:layout_constraintStart_toEndOf="@+id/b0"
        app:layout_constraintTop_toBottomOf="@+id/b9" />

    <Button
        android:id="@+id/b0"
```

```
    android:layout_width="65dp"
    android:layout_height="65dp"
    android:text="0"
    android:textAppearance="@style/TextAppearance.AppCompat.Display1"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toStartOf="@+id/be"
    app:layout_constraintHorizontal_bias="0.5"
    app:layout_constraintStart_toEndOf="@+id/bc"
    app:layout_constraintTop_toBottomOf="@+id/b8" />
```

<Button

```
    android:id="@+id/b7"
    android:layout_width="65dp"
    android:layout_height="65dp"
    android:text="7"
    android:textAppearance="@style/TextAppearance.AppCompat.Display1"
    app:layout_constraintBottom_toTopOf="@+id/bc"
    app:layout_constraintEnd_toStartOf="@+id/b8"
    app:layout_constraintHorizontal_bias="0.5"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/b4" />
```

<Button

```
    android:id="@+id/bm"
    android:layout_width="65dp"
    android:layout_height="65dp"
    android:text="*"
    android:textAppearance="@style/TextAppearance.AppCompat.Display1"
    app:layout_constraintBottom_toTopOf="@+id/bd"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.5"
    app:layout_constraintStart_toEndOf="@+id/b9"
    app:layout_constraintTop_toBottomOf="@+id/bs" />
```

<Button

```
    android:id="@+id/b9"
    android:layout_width="65dp"
    android:layout_height="65dp"
    android:text="9"
    android:textAppearance="@style/TextAppearance.AppCompat.Display1"
    app:layout_constraintBottom_toTopOf="@+id/be"
    app:layout_constraintEnd_toStartOf="@+id/bm"
    app:layout_constraintHorizontal_bias="0.5"
    app:layout_constraintStart_toEndOf="@+id/b8"
    app:layout_constraintTop_toBottomOf="@+id/b6" />
```

<Button

```
    android:id="@+id/b8"
    android:layout_width="65dp"
    android:layout_height="65dp"
    android:text="8"
    android:textAppearance="@style/TextAppearance.AppCompat.Display1"
    app:layout_constraintBottom_toTopOf="@+id/b0"
    app:layout_constraintEnd_toStartOf="@+id/b9"
    app:layout_constraintHorizontal_bias="0.5"
    app:layout_constraintStart_toEndOf="@+id/b7"
    app:layout_constraintTop_toBottomOf="@+id/b5" />
```

<Button

```
    android:id="@+id/b4"
    android:layout_width="65dp"
    android:layout_height="65dp"
    android:text="4"
    android:textAppearance="@style/TextAppearance.AppCompat.Display1"
    app:layout_constraintBottom_toTopOf="@+id/b7"
    app:layout_constraintEnd_toStartOf="@+id/b5"
    app:layout_constraintHorizontal_bias="0.5"
```

```
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/b1" />

<Button
    android:id="@+id/bs"
    android:layout_width="65dp"
    android:layout_height="65dp"
    android:text="-"
    android:textAppearance="@style/TextAppearance.AppCompat.Display1"
    app:layout_constraintBottom_toTopOf="@+id/bm"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.5"
    app:layout_constraintStart_toEndOf="@+id/b6"
    app:layout_constraintTop_toBottomOf="@+id/bp" />

<Button
    android:id="@+id/b6"
    android:layout_width="65dp"
    android:layout_height="65dp"
    android:text="6"
    android:textAppearance="@style/TextAppearance.AppCompat.Display1"
    app:layout_constraintBottom_toTopOf="@+id/b9"
    app:layout_constraintEnd_toStartOf="@+id/bs"
    app:layout_constraintHorizontal_bias="0.5"
    app:layout_constraintStart_toEndOf="@+id/b5"
    app:layout_constraintTop_toBottomOf="@+id/b3" />

<Button
    android:id="@+id/b5"
    android:layout_width="65dp"
    android:layout_height="65dp"
    android:text="5"
    android:textAppearance="@style/TextAppearance.AppCompat.Display1"
    app:layout_constraintBottom_toTopOf="@+id/b8"
    app:layout_constraintEnd_toStartOf="@+id/b6"
    app:layout_constraintHorizontal_bias="0.5"
    app:layout_constraintStart_toEndOf="@+id/b4"
    app:layout_constraintTop_toBottomOf="@+id/b2" />

<Button
    android:id="@+id/bp"
    android:layout_width="65dp"
    android:layout_height="65dp"
    android:text="+"
    android:textAppearance="@style/TextAppearance.AppCompat.Display1"
    app:layout_constraintBottom_toTopOf="@+id/bs"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.5"
    app:layout_constraintStart_toEndOf="@+id/b3"
    app:layout_constraintTop_toBottomOf="@+id/et" />

<EditText
    android:id="@+id/et"
    android:layout_width="350dp"
    android:layout_height="64dp"
    android:ems="10"
    android:inputType="number"
    android:textAppearance="@style/TextAppearance.AppCompat.Display1"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.259" />

<Button
    android:id="@+id/b1"
    android:layout_width="65dp"
    android:layout_height="65dp"
```

```

        android:text="1"
        android:textAppearance="@style/TextAppearance.AppCompat.Display1"
        app:layout_constraintBottom_toTopOf="@+id/b4"
        app:layout_constraintEnd_toStartOf="@+id/b2"
        app:layout_constraintHorizontal_bias="0.5"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/et" />
<Button
    android:id="@+id/b2"
    android:layout_width="65dp"
    android:layout_height="65dp"
    android:text="2"
    android:textAppearance="@style/TextAppearance.AppCompat.Display1"
    app:layout_constraintBottom_toTopOf="@+id/b5"
    app:layout_constraintEnd_toStartOf="@+id/b3"
    app:layout_constraintHorizontal_bias="0.5"
    app:layout_constraintStart_toEndOf="@+id/b1"
    app:layout_constraintTop_toBottomOf="@+id/et" />

<Button
    android:id="@+id/b3"
    android:layout_width="65dp"
    android:layout_height="65dp"
    android:text="3"
    android:textAppearance="@style/TextAppearance.AppCompat.Display1"
    app:layout_constraintBottom_toTopOf="@+id/b6"
    app:layout_constraintEnd_toStartOf="@+id/bp"
    app:layout_constraintHorizontal_bias="0.5"
    app:layout_constraintStart_toEndOf="@+id/b2"
    app:layout_constraintTop_toBottomOf="@+id/et" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

