Program 6

Develop a Standard calculator application to perform basic calculations like addition, subtraction, multiplication and Division using 2 EditText and 1 TextView for displaying result.

Activity_main.xml

```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">

    <EditText
        android:id="@+id/e1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="10"
        android:inputType="textPersonName"
        android:text=""
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.007" />
    <EditText
        android:id="@+id/e2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="10"
        android:inputType="textPersonName"
        android:text=""
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.55"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.103" />
    <TextView
        android:id="@+id/result"
        android:layout_width="151dp"
        android:layout_height="73dp"
        android:text=""
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.2" />
    <Button
        android:id="@+id/badd"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="+"
        app:layout_constraintBottom_toBottomOf="parent"
```

```xml
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.034"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.316" />
    <Button
        android:id="@+id/bsub"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="-"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.402"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.316" />
    <Button
        android:id="@+id/bmul"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="*"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.693"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.316" />
    <Button
        android:id="@+id/bdiv"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="/"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.996"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.316" />


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

Main activity.java

```java
package com.example.finalpgm6;

import androidx.appcompat.app.AppCompatActivity;

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

public class MainActivity extends AppCompatActivity {
    TextView res;
    EditText n1,n2;
    Button ba,bs,bm,bd;
```

```java
    double val1,val2,r;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        res=(TextView)findViewById(R.id.result);
        n1=(EditText)findViewById(R.id.e1);
        n2=(EditText)findViewById(R.id.e2);
        ba=(Button)findViewById(R.id.badd);
        bs=(Button)findViewById(R.id.bsub);
        bm=(Button)findViewById(R.id.bmul);
        bd=(Button)findViewById(R.id.bdiv);
        ba.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                val1=Double.parseDouble(n1.getText().toString());
                val2=Double.parseDouble(n2.getText().toString());
                r=val1+val2;
                res.setText(Double.toString(r));
            }
        });
        bs.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                val1=Double.parseDouble(n1.getText().toString());
                val2=Double.parseDouble(n2.getText().toString());
                r=val1-val2;
                res.setText(Double.toString(r));
            }
        });
        bm.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                val1=Double.parseDouble(n1.getText().toString());
                val2=Double.parseDouble(n2.getText().toString());
                r=val1*val2;
                res.setText(Double.toString(r));
            }
        });
        bd.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                val1=Double.parseDouble(n1.getText().toString());
                val2=Double.parseDouble(n2.getText().toString());
                r=val1/val2;
                res.setText(Double.toString(r));
            }
        });
    }
}
```

```java
1    package com.example.finalpgm6;
2
3    import androidx.appcompat.app.AppCompatActivity;
4
5    import android.os.Bundle;
6    import android.os.Bundle;
7    import android.view.View;
8    import android.widget.Button;
9    import android.widget.EditText;
10   import android.widget.TextView;
11
12   public class MainActivity extends AppCompatActivity {
13       TextView res;
14       EditText n1,n2;
15       Button ba,bs,bm,bd;
16       double val1,val2,r;
17       @Override
18       protected void onCreate(Bundle savedInstanceState) {
19           super.onCreate(savedInstanceState);
20           setContentView(R.layout.activity_main);
21           res=(TextView)findViewById(R.id.result);
22           n1=(EditText)findViewById(R.id.e1);
23           n2=(EditText)findViewById(R.id.e2);
24           ba=(Button)findViewById(R.id.badd);
25           bs=(Button)findViewById(R.id.bsub);
26           bm=(Button)findViewById(R.id.bmul);
27           bd=(Button)findViewById(R.id.bdiv);
28           ba.setOnClickListener(new View.OnClickListener() {
29               @Override
30               public void onClick(View v) {
31                   val1=Double.parseDouble(n1.getText().toString());
```

Emulator: Pixel 4 API 27 ×

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Run   TODO   Problems   Terminal   Logcat   Build   Profiler   App Inspection

An unexpected packet was received before the handshake. (moments ago)   3:8 LF UTF-8 4 spaces

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Screenshot 2

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help   final pgm 6 - MainActivity.java [final_pgm_6.app]

finalpgm6) app) src) main) java) com) example) finalpgm6) MainActivity

activity_main.xml ×   MainActivity.java ×

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