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CALCULATOR

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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:orientation="vertical"
    android:layout_margin="20dp"
    android:background="@drawable/c"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/name"
        android:layout_marginTop="50dp"
        android:textSize="50dp"
        android:gravity="center"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="CALCULATOR"
        android:textColor="#070708"/>

    <EditText
        android:id="@+id/res"
        android:layout_marginTop="20dp"
        android:gravity="right"
        android:textSize="40dp"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:ems="10"
        android:inputType="textPersonName"
        android:text="0"
        android:textColor="#01090d"/>

   <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal">

        <Button
            android:id="@+id/nine"
            android:layout_width="match_parent"
            android:layout_height="80dp"
            android:text="9"
            android:textSize="30dp"
            android:textColor="#01090d"
            android:backgroundTint="#d5d9db"
            android:layout_weight="1"/>
        <Button
            android:id="@+id/eight"
            android:layout_width="match_parent"
            android:layout_height="80dp"
            android:text="8"
            android:textSize="30dp"
            android:textColor="#01090d"
```

```xml
            android:backgroundTint="#d5d9db"
            android:layout_weight="1"/>
        <Button
            android:id="@+id/seven"
            android:layout_width="match_parent"
            android:layout_height="80dp"
            android:text="7"
            android:textSize="30dp"
            android:textColor="#01090d"
            android:backgroundTint="#d5d9db"
            android:layout_weight="1"/>
        <Button
            android:id="@+id/plus"
            android:layout_width="match_parent"
            android:layout_height="80dp"
            android:text="+"
            android:textSize="30dp"
            android:backgroundTint="#044c52"
            android:layout_weight="1"/>


    </LinearLayout>
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal">

        <Button
            android:id="@+id/six"
            android:layout_width="match_parent"
            android:layout_height="80dp"
            android:text="6"
            android:textSize="30dp"
            android:textColor="#01090d"
            android:backgroundTint="#d5d9db"
            android:layout_weight="1"/>
        <Button
            android:id="@+id/five"
            android:layout_width="match_parent"
            android:layout_height="80dp"
            android:text="5"
            android:textSize="30dp"
            android:textColor="#01090d"
            android:backgroundTint="#d5d9db"
            android:layout_weight="1"/>
        <Button
            android:id="@+id/four"
            android:layout_width="match_parent"
            android:layout_height="80dp"
            android:text="4"
            android:textSize="30dp"
            android:textColor="#01090d"
            android:backgroundTint="#d5d9db"
            android:layout_weight="1"/>
        <Button
            android:id="@+id/minus"
            android:layout_width="match_parent"
            android:layout_height="80dp"
            android:text="-"
            android:textSize="30dp"
            android:backgroundTint="#044c52"
```

```xml
                    android:layout_weight="1"/>


    </LinearLayout>
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal">

        <Button
            android:id="@+id/three"
            android:layout_width="match_parent"
            android:layout_height="80dp"
            android:text="3"
            android:textSize="30dp"
            android:textColor="#01090d"
            android:backgroundTint="#d5d9db"
            android:layout_weight="1"/>
        <Button
            android:id="@+id/two"
            android:layout_width="match_parent"
            android:layout_height="80dp"
            android:text="2"
            android:textSize="30dp"
            android:textColor="#01090d"
            android:backgroundTint="#d5d9db"
            android:layout_weight="1"/>
        <Button
            android:id="@+id/one"
            android:layout_width="match_parent"
            android:layout_height="80dp"
            android:text="1"
            android:textSize="30dp"
            android:textColor="#01090d"
            android:backgroundTint="#d5d9db"
            android:layout_weight="1"/>
        <Button
            android:id="@+id/multi"
            android:layout_width="match_parent"
            android:layout_height="80dp"
            android:text="*"
            android:textSize="30dp"
            android:backgroundTint="#044c52"
            android:layout_weight="1"/>


    </LinearLayout>
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal">

        <Button
            android:id="@+id/dot"
            android:layout_width="match_parent"
            android:layout_height="80dp"
            android:text="."
            android:textSize="30dp"
            android:textColor="#01090d"
            android:backgroundTint="#d5d9db"
            android:layout_weight="1"/>
        <Button
```

```xml
        android:id="@+id/zero"
        android:layout_width="match_parent"
        android:layout_height="80dp"
        android:text="0"
        android:textSize="30dp"
        android:textColor="#01090d"
        android:backgroundTint="#d5d9db"
        android:layout_weight="1"/>
    <Button
        android:id="@+id/mode"
        android:layout_width="match_parent"
        android:layout_height="80dp"
        android:text="%"
        android:textSize="30dp"
        android:textColor="#01090d"
        android:backgroundTint="#d5d9db"
        android:layout_weight="1"/>
    <Button
        android:id="@+id/div"
        android:layout_width="match_parent"
        android:layout_height="80dp"
        android:text="/"
        android:textSize="30dp"
        android:backgroundTint="#044c52"

        android:layout_weight="1"/>


    </LinearLayout>
    <Button
        android:id="@+id/equals"
        android:layout_width="match_parent"
        android:layout_height="90dp"
        android:text="="
        android:textColor="#e8f9fc"
        android:backgroundTint="#044c52"
        android:textSize="50dp"/>
    <Button
        android:id="@+id/clear"
        android:layout_width="match_parent"
        android:layout_height="90dp"
        android:text="clear"
        android:backgroundTint="#044c52"

        android:textSize="25dp"/>

</LinearLayout>
```

MainActivity.java
```java
package com.example.yashodha;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.service.autofill.Validator;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Switch;
```

```java
public class MainActivity extends AppCompatActivity implements OnClickListener {
    Button nine, eight, seven, plus, six, five, four, minus, three, two, one, multi, dot, zero, mode, div, equals, clear;
    EditText res;
    String operatorPresssed = "";

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        res = findViewById(R.id.res);
        nine = findViewById(R.id.nine);
        eight = findViewById(R.id.eight);
        seven = findViewById(R.id.seven);
        plus = findViewById(R.id.plus);
        six = findViewById(R.id.six);
        five = findViewById(R.id.five);
        four = findViewById(R.id.four);
        minus = findViewById(R.id.minus);
        three = findViewById(R.id.three);
        two = findViewById(R.id.two);
        one = findViewById(R.id.one);
        multi = findViewById(R.id.multi);
        dot = findViewById(R.id.dot);
        zero = findViewById(R.id.zero);
        mode = findViewById(R.id.mode);
        div = findViewById(R.id.div);
        equals = findViewById(R.id.equals);
        clear = findViewById(R.id.clear);

        nine.setOnClickListener(this);
        eight.setOnClickListener(this);
        seven.setOnClickListener(this);
        plus.setOnClickListener(this);
        six.setOnClickListener(this);
        five.setOnClickListener(this);
        four.setOnClickListener(this);
        minus.setOnClickListener(this);
        three.setOnClickListener(this);
        two.setOnClickListener(this);
        one.setOnClickListener(this);
        multi.setOnClickListener(this);
        dot.setOnClickListener(this);
        zero.setOnClickListener(this);
        mode.setOnClickListener(this);
        div.setOnClickListener(this);
        equals.setOnClickListener(this);
        clear.setOnClickListener(this);


    }


    @Override
    public void onClick(View view) {
        switch (view.getId()) {
            case R.id.nine:
                res.append("9");
                break;
            case R.id.eight:
                res.append("8");
                break;
            case R.id.seven:
```

```java
                res.append("7");
                break;
            case R.id.plus:
                res.append("+");
                operatorPresssed = "+";
                break;
            case R.id.six:
                res.append("6");
                break;
            case R.id.five:
                res.append("5");
                break;
            case R.id.four:
                res.append("4");
                break;
            case R.id.minus:
                res.append("-");
                operatorPresssed = "-";
                break;
            case R.id.three:
                res.append("3");
                break;
            case R.id.two:
                res.append("2");
                break;
            case R.id.one:
                res.append("1");
                break;
            case R.id.multi:
                res.append("*");
                operatorPresssed = "*";
                break;
            case R.id.dot:
                res.append(".");
                operatorPresssed = ".";
                break;
            case R.id.zero:
                res.append("0");
                break;
            case R.id.mode:
                res.append("%");
                operatorPresssed = "%";
                break;
            case R.id.div:
                res.append("/");
                operatorPresssed = "/";
                break;
            case R.id.clear:
                res.setText("");
                break;
            case R.id.equals:
                double finalRes = compute(res.getText().toString(), operatorPresssed);

                res.setText(String.valueOf(finalRes));
        }
    }

    private double compute(String toString, String operatorPresssed) {
        String mArray[] = toString.split("\\+|-|\\*/\\/\\%");
        double op1 = Double.parseDouble(mArray[0]);
        double op2 = Double.parseDouble(mArray[1]);
        switch (operatorPresssed) {
```

```java
        case "+":
            return op1 + op2;
        case "-":
            return op1 - op2;
        case "*":
            return op1 * op2;
        case "/":
            return op1 / op2;
        case "%":
            return op1 % op2;
        }
        return 0.0;
    }
}
```
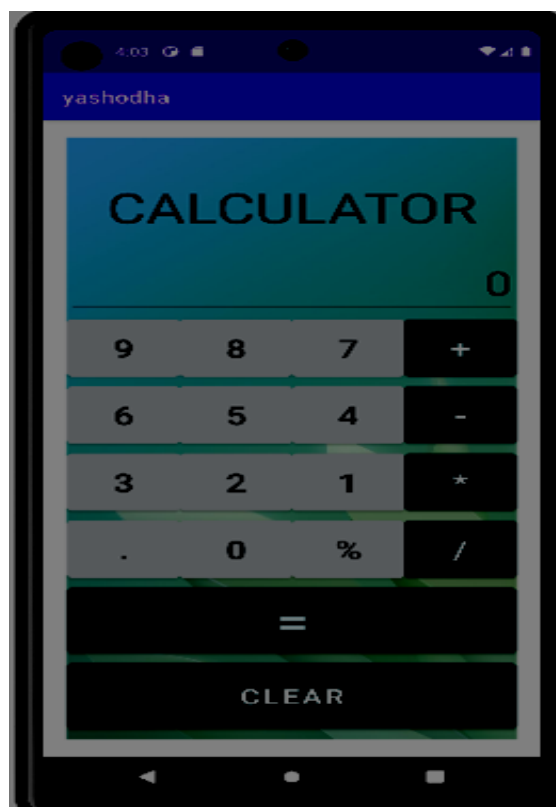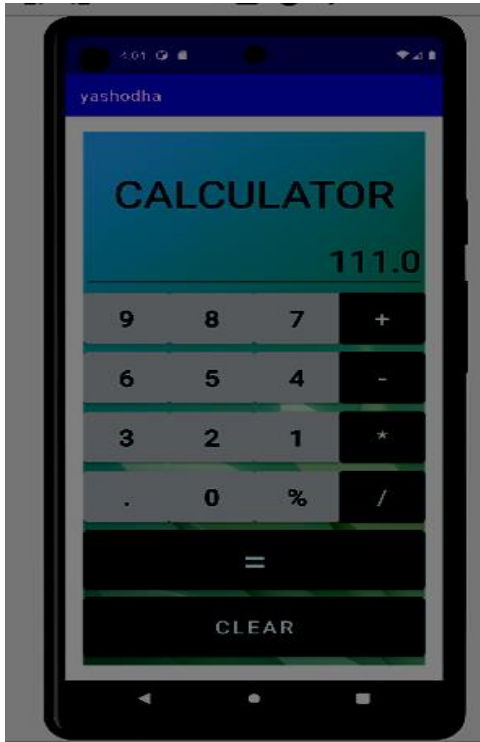
CALCULATOR

SUBSTRACTION

ADDITION

When click on CLEAR button