

XML CODE:

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=".MainActivity" >
```

```
<Button
    android:id="@+id/button9"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignBaseline="@+id/button8"
    android:layout_alignBottom="@+id/button8"
    android:layout_alignRight="@+id/button6"
    android:text="1" />
```

```
<Button
    android:id="@+id/button3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignBaseline="@+id/button2"
    android:layout_alignBottom="@+id/button2"
    android:layout_toRightOf="@+id/button2"
    android:text="7" />
```

```
<Button
    android:id="@+id/button6"
```

```
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_above="@+id/button7"
android:layout_toRightOf="@+id/button5"
android:text="4" />
```

<Button

```
android:id="@+id/button5"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_below="@+id/button2"
android:layout_toLeftOf="@+id/button3"
android:text="5" />
```

<Button

```
android:id="@+id/button4"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_below="@+id/editText1"
android:layout_marginTop="102dp"
android:layout_toLeftOf="@+id/button5"
android:text="6" />
```

<Button

```
android:id="@+id/button8"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignBaseline="@+id/button7"
android:layout_alignBottom="@+id/button7"
android:layout_toLeftOf="@+id/button9"
android:text="2" />
```

<Button

```
android:id="@+id/button2"  
android:layout_width="wrap_content"  
android:layout_height="wrap_content"  
android:layout_above="@+id/button6"  
android:layout_toRightOf="@+id/button1"  
android:text="8" />
```

<Button

```
android:id="@+id/button1"  
android:layout_width="wrap_content"  
android:layout_height="wrap_content"  
android:layout_above="@+id/button5"  
android:layout_alignLeft="@+id/button7"  
android:text="9" />
```

<Button

```
android:id="@+id/button7"  
android:layout_width="wrap_content"  
android:layout_height="wrap_content"  
android:layout_alignLeft="@+id/textView1"  
android:layout_below="@+id/button4"  
android:text="3" />
```

<EditText

```
android:id="@+id/editText1"  
android:layout_width="wrap_content"  
android:layout_height="wrap_content"  
android:layout_alignLeft="@+id/button1"  
android:layout_below="@+id/textView1"  
android:layout_marginTop="29dp"  
android:ems="10" />
```

<Button

```
android:id="@+id/button11"  
android:layout_width="wrap_content"  
android:layout_height="wrap_content"  
android:layout_below="@+id/button9"  
android:layout_toRightOf="@+id/button10"  
android:text="." />
```

<Button

```
android:id="@+id/button10"  
android:layout_width="wrap_content"  
android:layout_height="wrap_content"  
android:layout_below="@+id/button8"  
android:layout_toLeftOf="@+id/button8"  
android:text="0" />
```

<Button

```
android:id="@+id/button13"  
android:layout_width="wrap_content"  
android:layout_height="wrap_content"  
android:layout_below="@+id/button6"  
android:layout_toRightOf="@+id/button9"  
android:text="+" />
```

<Button

```
android:id="@+id/button14"  
android:layout_width="wrap_content"  
android:layout_height="wrap_content"  
android:layout_below="@+id/button3"  
android:layout_toRightOf="@+id/button3"  
android:text="-" />
```

<Button

```
android:id="@+id/button15"
```

```
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignBottom="@+id/button12"
android:layout_toRightOf="@+id/button12"
android:text="*" />
```

<Button

```
android:id="@+id/button12"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignBaseline="@+id/button11"
android:layout_alignBottom="@+id/button11"
android:layout_alignLeft="@+id/button9"
android:text="=" />
```

<Button

```
android:id="@+id/button16"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignBottom="@+id/button3"
android:layout_alignLeft="@+id/button14"
android:text="/" />
```

<Button

```
android:id="@+id/button17"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignLeft="@+id/button10"
android:layout_below="@+id/button11"
android:text="cle" />
```

</RelativeLayout>

JAVA CODE:

```
package com.example.cal;

import android.app.Activity;

import android.os.Bundle;

import android.view.View;

import android.view.View.OnClickListener;

import android.widget.Button;

import android.widget.EditText;

public class MainActivity extends Activity implements OnClickListener {

    Button nine,eig,sev,six,fiv,four,thr,two,one,zero,dot,plus,mins,div,mul,eq,cl;

    EditText et;

    String s = "0";

    int result = 0;

    char IO = ' ';

    @Override

    protected void onCreate(Bundle savedInstanceState)

    {
        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);

        nine=(Button)findViewById(R.id.button1);

        eig=(Button)findViewById(R.id.button2);
```

```
sev=(Button)findViewById(R.id.button3);

six=(Button)findViewById(R.id.button4);

fiv=(Button)findViewById(R.id.button5);

four=(Button)findViewById(R.id.button6);

thr=(Button)findViewById(R.id.button7);

two=(Button)findViewById(R.id.button8);

one=(Button)findViewById(R.id.button9);

zero=(Button)findViewById(R.id.button10);

dot=(Button)findViewById(R.id.button11);

plus=(Button)findViewById(R.id.button13);

mins=(Button)findViewById(R.id.button14);

div=(Button)findViewById(R.id.button16);

mul=(Button)findViewById(R.id.button15);

eq=(Button)findViewById(R.id.button12);

cl=(Button)findViewById(R.id.button17);

et=(EditText)findViewById(R.id.editText1);

nine.setOnClickListener(this);

eig.setOnClickListener(this);

sev.setOnClickListener(this);

six.setOnClickListener(this);
```

```
fiv.setOnClickListener(this);  
  
four.setOnClickListener(this);  
  
thr.setOnClickListener(this);  
  
two.setOnClickListener(this);  
  
one.setOnClickListener(this);  
  
dot.setOnClickListener(this);  
  
plus.setOnClickListener(this);  
  
mins.setOnClickListener(this);  
  
div.setOnClickListener(this);  
  
mul.setOnClickListener(this);  
  
eq.setOnClickListener(this);  
  
cl.setOnClickListener(this);  
  
et.setOnClickListener(this);    }
```

```
    @Override
```

```
    public void onClick(View v)
```

```
    { switch(v.getId())
```

```
    { case R.id.button1:
```

```
      case R.id.button2:
```

```
      case R.id.button3:
```

```
      case R.id.button4:
```


case R.id.button5:

case R.id.button6:

case R.id.button7:

case R.id.button8:

case R.id.button9:

case R.id.button10:

String inDigit = ((Button) v).getText().toString();

if (s.equals("0"))

{ s= inDigit; }

else

{ s+=inDigit; }

et.setText(s);

if(lO == '=')

{ result=0;

lO = '+'; }

break;

case R.id.button13:

compute();

lO = '+';

break;

```
case R.id.button14:
```

```
compute();
```

```
lO = '-';
```

```
break;
```

```
case R.id.button16:
```

```
compute();
```

```
lO = '/';
```

```
break;
```

```
case R.id.button15:
```

```
compute();
```

```
lO = '*';
```

```
break;
```

```
case R.id.button12:
```

```
compute();
```

```
lO = '=';
```

```
break;
```

```
case R.id.button17:
```

```
result = 0;
```

```
    s = "0";
```

```
lO = ' ';
```

```

et.setText("0");

break;

    } }

private void compute()

{ int inNum = Integer.parseInt(s);

    s = "0";

if (lO == ' ')

    { result = inNum; }

else if (lO == '+')

    { result += inNum; }

else if (lO == '-')

    { result -= inNum; }

else if (lO == '*')

    { result *= inNum; }

else if (lO == '/')

    { result /= inNum; }

else if (lO == '=')

    {      }      et.setText(String.valueOf(result));  } }

```