

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" >
    <TextView
        android:id="@+id/textView1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/hello_world" />
    <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));  } }

```