



Code of XML

```

<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/button3"
        ...
        android:layout_alignParentTop="true"
        android:layout_alignParentLeft="true" />

```

```
style="?android:attr/buttonStyleSmall"  
    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="@string/_3"/>
```

```
<Button  
    android:id="@+id/button1"  
    style="?android:attr/buttonStyleSmall"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_alignParentLeft="true"  
    android:layout_alignParentTop="true"  
    android:layout_marginLeft="16dp"  
    android:layout_marginTop="122dp"  
    android:text="@string/_1" />
```

```
<Button  
    android:id="@+id/button2"  
    style="?android:attr/buttonStyleSmall"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_alignBaseline="@+id/button1"
```

```
    android:layout_alignBottom="@+id/button1"
    android:layout_toRightOf="@+id/button1"
    android:text="@string/_2" />
```

```
<Button
    android:id="@+id/button5"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/button1"
    android:layout_toRightOf="@+id/button1"
    android:text="@string/_5" />
```

```
<Button
    android:id="@+id/button7"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/button1"
    android:layout_below="@+id/button5"
    android:text="@string/_7" />
```

```
<Button
    android:id="@+id/button4"
    style="?android:attr/buttonStyleSmall"
```

```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_above="@+id/button7"
    android:layout_alignLeft="@+id/button7"
    android:text="@string/_4" />
```

```
<Button
    android:id="@+id/button6"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_above="@+id/button7"
    android:layout_alignLeft="@+id/button3"
    android:text="@string/_6" />
```

```
<Button
    android:id="@+id/button8"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/button5"
    android:layout_alignTop="@+id/button7"
    android:text="@string/_8" />
```

```
<Button
```

```
    android:id="@+id/button9"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignBaseline="@+id/button8"
    android:layout_alignBottom="@+id/button8"
    android:layout_alignLeft="@+id/button6"
    android:text="@string/_9" />
```

```
<Button
    android:id="@+id/button10"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/button7"
    android:layout_toLeftOf="@+id/button8"
    android:text="@string/_0" />
```

```
<Button
    android:id="@+id/button11"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/button8"
    android:layout_alignTop="@+id/button10"
```

```
    android:text="@string/dot" />
```

```
<Button  
    android:id="@+id/button12"  
    style="?android:attr/buttonStyleSmall"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_alignTop="@+id/button11"  
    android:layout_toRightOf="@+id/button11"  
    android:text="@string/equ" />
```

```
<Button  
    android:id="@+id/button13"  
    style="?android:attr/buttonStyleSmall"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_alignTop="@+id/button3"  
    android:layout_toRightOf="@+id/button3"  
    android:text="@string/add" />
```

```
<Button  
    android:id="@+id/button14"  
    style="?android:attr/buttonStyleSmall"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"
```

```
    android:layout_above="@+id/button9"  
    android:layout_alignLeft="@+id/button13"  
    android:text="@string/sub" />
```

```
<Button  
    android:id="@+id/button15"  
    style="?android:attr/buttonStyleSmall"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_alignLeft="@+id/button14"  
    android:layout_alignTop="@+id/button9"  
    android:text="@string/mult" />
```

```
<Button  
    android:id="@+id/button16"  
    style="?android:attr/buttonStyleSmall"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_alignBaseline="@+id/button12"  
    android:layout_alignBottom="@+id/button12"  
    android:layout_toRightOf="@+id/button12"  
    android:text="@string/div" />
```

```
<EditText  
    android:id="@+id/editText1"
```

```
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_above="@+id/button3"
    android:layout_centerHorizontal="true"
    android:layout_marginBottom="37dp"
    android:ems="10" android:inputType="text"/>
<Button
    android:id="@+id/button17"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/button10"
    android:layout_toLeftOf="@+id/button11"
    android:text="@string/c" />
</RelativeLayout>
<?xml version="1.0" encoding="utf-8"?>
<resources>
    CODE OF STRING VALUE
    <string name="app_name">Calculators</string>
    <string name="action_settings">Settings</string>
    <string name="hello_world">Hello world!</string>
    <string name="_3">3</string>
    <string name="add">+</string>
    <string name="c">C</string>
    <string name="_5">5</string>
```

```
<string name="_4">4</string>
<string name="_0">0</string>
<string name="_1">1</string>
<string name="_2">2</string>
<string name="sub">-</string>
<string name="div">/</string>
<string name="mult">*</string>
<string name="_6">6</string>
<string name="_7">7</string>
<string name="_8">8</string>
<string name="_9">9</string>
<string name="equ">=</string>
<string name="dot">. </string>
</resources>
```

CODE OF JAVA

```
package com.example.calculators;
```

```
import android.os.Bundle;
import android.app.Activity;
import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
```

```
public class MainActivity extends Activity {  
    Button b1,b2,b3,b4,b5,b6,b7,b8,b9,b0,bdot,badd,bsub,bmul,bdiv,beq,bc;  
    EditText et;  
    int val1,val2;  
    boolean add,sub,div,mul;  
    //char press;  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_main);  
        b1=(Button) findViewById(R.id.button1);  
        b2=(Button) findViewById(R.id.button2);  
        b3=(Button) findViewById(R.id.button3);  
        b4=(Button) findViewById(R.id.button4);  
        b5=(Button) findViewById(R.id.button5);  
        b6=(Button) findViewById(R.id.button6);  
        b7=(Button) findViewById(R.id.button7);  
        b8=(Button) findViewById(R.id.button8);  
        b9=(Button) findViewById(R.id.button9);  
        b0=(Button) findViewById(R.id.button10);  
        bdot=(Button) findViewById(R.id.button11);  
        badd=(Button) findViewById(R.id.button13);  
        bsub=(Button) findViewById(R.id.button14);  
        bmul=(Button) findViewById(R.id.button15);
```

```
bdiv=(Button) findViewById(R.id.button16);
beq=(Button) findViewById(R.id.button12);
bc=(Button) findViewById(R.id.button17);
et=(EditText) findViewById(R.id.editText1);

b1.setOnClickListener(new View.OnClickListener() {

    @Override
    public void onClick(View v) {
        // TODO Auto-generated method stub

        et.setText(et.getText()+"1");
    }
});

b2.setOnClickListener(new View.OnClickListener() {

    @Override
    public void onClick(View v) {
        // TODO Auto-generated method stub
        et.setText(et.getText()+"2");
    }
});

b3.setOnClickListener(new View.OnClickListener() {

    @Override
    public void onClick(View v) {
        // TODO Auto-generated method stub
        et.setText(et.getText()+"3");
    }
});
```

```
}

});

b4.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

// TODO Auto-generated method stub

et.setText(et.getText()+"4");

}

});

b5.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

// TODO Auto-generated method stub

et.setText(et.getText()+"5");

}

});

b6.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

// TODO Auto-generated method stub

et.setText(et.getText()+"6");

}

});

b7.setOnClickListener(new View.OnClickListener() {

@Override
```

```
public void onClick(View v) {
    // TODO Auto-generated method stub
    et.setText(et.getText()+"7");
}

});

b8.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        // TODO Auto-generated method stub
        et.setText(et.getText()+"8");
    }
});

b9.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        // TODO Auto-generated method stub
        et.setText(et.getText()+"9");
    }
});

b0.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        // TODO Auto-generated method stub
        et.setText(et.getText()+"0");
    }
});
```

```
});

bdot.setOnClickListener(new View.OnClickListener() {

    @Override

    public void onClick(View v) {

        // TODO Auto-generated method stub

        et.setText(et.getText()+".");

    }

});
```

```
badd.setOnClickListener(new View.OnClickListener() {

    @Override

    public void onClick(View v) {

        val1=Integer.parseInt(et.getText()+"");

        add=true;

        et.setText(null);

    }

});
```

```
bsub.setOnClickListener(new View.OnClickListener() {

    @Override

    public void onClick(View v) {

        val1=Integer.parseInt(et.getText()+"");

        sub=true;

        et.setText(null);

    }

});
```

```
bdiv.setOnClickListener(new View.OnClickListener() {  
    @Override  
    public void onClick(View v) {  
        val1=Integer.parseInt(et.getText()+"");  
        div=true;  
        et.setText(null);  
    }  
});  
  
bmul.setOnClickListener(new View.OnClickListener() {  
    @Override  
    public void onClick(View v) {  
        val1=Integer.parseInt(et.getText()+"");  
        mul=true;  
        et.setText(null);  
    }  
});  
  
beq.setOnClickListener(new View.OnClickListener() {  
    @Override  
    public void onClick(View v) {  
        val2=Integer.parseInt(et.getText()+"");  
        if (add==true) {  
            et.setText(val1+val2+"");  
            add=false;  
        }  
        if (sub==true) {  
            et.setText(val1-val2+"");  
            sub=false;  
        }  
    }  
});
```

```
        et.setText(val1-val2+"");
        sub=false;
    }

    if (mul==true) {
        et.setText(val1*val2+"");
        mul=false;
    }

    if (div==true) {
        et.setText(val1/val2+"");
        div=false;
    }

    });

bc.setOnClickListener(new View.OnClickListener() {

    @Override

    public void onClick(View v) {
        et.setText(null);
    }
});

}

@Override

public boolean onCreateOptionsMenu(Menu menu) {
    // Inflate the menu; this adds items to the action bar if it is present.
    getMenuInflater().inflate(R.menu.main, menu);
}
```

```
    return true;  
}  
  
  
@Override  
  
public boolean onOptionsItemSelected(MenuItem item) {  
  
    // Handle action bar item clicks here. The action bar will  
  
    // automatically handle clicks on the Home/Up button, so long  
  
    // as you specify a parent activity in AndroidManifest.xml.  
  
    int id = item.getItemId();  
  
    if (id == R.id.action_settings) {  
  
        return true;  
    }  
  
    return super.onOptionsItemSelected(item);  
}  
}
```