Program calculators

Windows for string xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<resources>

    <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 for xml
```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"
```

```xml
    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"
        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
```

```xml
        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"
```

```xml
        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"
```

```xml
        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"
```

```xml
        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>
```

Code java

```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;
```

```java
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);
```

```java
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
```

```java
    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");
    }
```

```java
        });
        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);
```

```java
 }
 });
 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;
 }
```

```java
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);
    }
}
```