**Java实例代码**

**package** yuanzhongmi.mycalculator;  
  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.util.Log;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.EditText;  
  
**public class** calculator **extends** AppCompatActivity **implements** View.OnClickListener{  
 **private** EditText **EV\_Result**;  
 **private double currentResult**=0.0;  
 **private boolean firstDigit**=**true**;  
 **private** String **operate** = **"="**;  
 **private boolean operateValidFlag**=**true**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_calculator***);  
 **this**.init();  
 }  
 */\*\*  
 \* 点击事件重载方法  
 \** ***@param v*** *当前点击的控件  
 \*/* @Override  
 **public void** onClick(View v) {  
 String pre = ((Button) v).getText().toString();  
 Log.*i*(**"TAG"**, pre);  
 **switch** (v.getId()) {  
 **case** R.id.***Btn\_Back***:  
 setBtn\_Back();  
 **break**;  
 **case** R.id.***Btn\_C***:  
 setBtn\_C();  
 **break**;  
 **case** R.id.***Btn\_Num0***:  
 **case** R.id.***Btn\_Num1***:  
 **case** R.id.***Btn\_Num2***:  
 **case** R.id.***Btn\_Num3***:  
 **case** R.id.***Btn\_Num4***:  
 **case** R.id.***Btn\_Num5***:  
 **case** R.id.***Btn\_Num6***:  
 **case** R.id.***Btn\_Num7***:  
 **case** R.id.***Btn\_Num8***:  
 **case** R.id.***Btn\_Num9***:  
 **case** R.id.***Btn\_DecimalPoint***:  
 setNum(pre);  
 **break**;  
 **case** R.id.***Btn\_Subtraction***:  
 **case** R.id.***Btn\_Addition***:  
 **case** R.id.***Btn\_ModuloDivision***:  
 **case** R.id.***Btn\_Multiplication***:  
 **case** R.id.***Btn\_Division***:  
 **case** R.id.***Btn\_Equal***:  
 setOperator(pre);  
 **break**;  
 }  
 }  
 */\*\*  
 \* 点击运算符处理  
 \** ***@param label*** *接收当前点击的运算符  
 \*/* **public void** setOperator(String label) {  
 **switch** (**operate**){  
 **case "/"**:*// 除法运算  
 // 如果当前结果文本框中的值等于0* **if** (getNumFromEV\_Result() == 0.0) {  
 *// 操作不合法* **operateValidFlag** = **false**;  
 **EV\_Result**.setText(**"除数不能为零！"**);  
 } **else** {  
 **currentResult** /= getNumFromEV\_Result();  
 }  
 **break**;  
 **case "+"**:*// 加法运算* **currentResult** += getNumFromEV\_Result();  
 **break**;  
 **case "-"**:*// 减法运算* **currentResult** -= getNumFromEV\_Result();  
 **break**;  
 **case "\*"**:*// 乘法运算* **currentResult** \*= getNumFromEV\_Result();  
 **break**;  
 **case "%"**:*// 除法运算* **currentResult** %= getNumFromEV\_Result();  
 **break**;  
 **case "="**:*// 赋值运算* **currentResult** = getNumFromEV\_Result();  
 **break**;  
 }  
 **if** (**operateValidFlag**) {*// 双精度浮点数的运算* **long** t1;  
 **double** t2;  
 t1 = (**long**) **currentResult**;  
 t2 = **currentResult** - t1;  
 **if** (t2 == 0) {  
 **EV\_Result**.setText(String.*valueOf*(t1));  
 } **else** {  
 **EV\_Result**.setText(String.*valueOf*(**currentResult**));  
 }  
 }  
 *// 运算符等于用户按的按钮* **operate** = label;  
 **firstDigit** = **true**;  
 **operateValidFlag** = **true**;  
 }  
 */\*\*  
 \* 点击数字处理  
 \** ***@param n*** *接收当前点击的数字  
 \*/* **public void** setNum(String n) {  
 **if** (**firstDigit**) {*// 输入的第一个数字* **EV\_Result**.setText(n);  
 } **else if** ((n.equals(**"."**)) && (!**EV\_Result**.getText().toString().contains(**"."**))) {  
 *// 输入的是小数点，并且之前没有小数点，则将小数点附在结果文本框的后面* String str = **EV\_Result**.getText().toString();  
 str += **"."**;  
 **EV\_Result**.setText(str);  
 } **else if** (!n.equals(**"."**)) {*// 如果输入的不是小数点，则将数字附在结果文本框的后面* String str = **EV\_Result**.getText().toString();  
 str += n;  
 **EV\_Result**.setText(str);  
 }  
 *// 以后输入的肯定不是第一个数字了* **firstDigit** = **false**;  
 }  
 */\*\*  
 \* 从文本框中获取数字  
 \*  
 \** ***@return*** *result  
 \*/* **public double** getNumFromEV\_Result() {  
 **double** result = 0;  
 **try** {  
 result = Double.*valueOf*(**EV\_Result**.getText().toString());  
 } **catch** (NumberFormatException e) {  
 Log.*i*(**"TAG"**,**"您输入的不是数字"**);  
 }  
 **return** result;  
 }  
 */\*\*  
 \* 设置清空C键  
 \*/* **public void** setBtn\_C() {  
 **EV\_Result**.setText(**"0"**);  
 **firstDigit** = **true**;  
 **operate** = **"="**;  
 }  
 */\*\*  
 \* 设置返回Back键  
 \*/* **public void** setBtn\_Back() {  
 String currentResult = **EV\_Result**.getText().toString();  
 **int** i = currentResult.length();  
 **if** (i > 0) {  
 currentResult = currentResult.substring(0, i - 1); *// 将文本最后一个字符去掉* **if** (currentResult.length() == 0) { *// 如果没有了内容，初始化计算器的各种值* **EV\_Result**.setText(**"0"**);  
 } **else** {  
 **EV\_Result**.setText(currentResult); *// 显示新的文本* }  
 }  
 }  
 */\*\*  
 \* 初始化控件  
 \*/* **public void** init() {  
 **EV\_Result**=(EditText)findViewById(R.id.***EV\_result***);  
  
 *// 第一行* Button Btn\_C; *// 清空结果框* Button Btn\_Back; *// 返回* Button Btn\_ModuloDivision; *// 模除* Button Btn\_Division; *// 除法  
 // 第二行* Button Btn\_Num7;  
 Button Btn\_Num8;  
 Button Btn\_Num9;  
 Button Btn\_Multiplication; *// 乘发  
 // 第三行* Button Btn\_Num4;  
 Button Btn\_Num5;  
 Button Btn\_Num6;  
 Button Btn\_Subtraction; *// 减法  
 // 第四行* Button Btn\_Num1;  
 Button Btn\_Num2;  
 Button Btn\_Num3;  
 Button Btn\_Addition; *// 加法  
 // 第五行* Button Btn\_Num0;  
 Button Btn\_DecimalPoint; *// 小数点* Button Btn\_Equal; *// 等于* Btn\_C=(Button)findViewById(R.id.***Btn\_C***);  
 Btn\_Back = (Button)findViewById(R.id.***Btn\_Back***);  
 Btn\_ModuloDivision = (Button)findViewById(R.id.***Btn\_ModuloDivision***);  
 Btn\_Division = (Button)findViewById(R.id.***Btn\_Division***);  
  
 Btn\_Num7 = (Button)findViewById(R.id.***Btn\_Num7***);  
 Btn\_Num8 = (Button)findViewById(R.id.***Btn\_Num8***);  
 Btn\_Num9 = (Button)findViewById(R.id.***Btn\_Num9***);  
 Btn\_Multiplication = (Button)findViewById(R.id.***Btn\_Multiplication***);  
  
 Btn\_Num4 = (Button)findViewById(R.id.***Btn\_Num4***);  
 Btn\_Num5 = (Button)findViewById(R.id.***Btn\_Num5***);  
 Btn\_Num6 = (Button)findViewById(R.id.***Btn\_Num6***);  
 Btn\_Subtraction = (Button)findViewById(R.id.***Btn\_Subtraction***);  
 Btn\_Num1 = (Button)findViewById(R.id.***Btn\_Num1***);  
 Btn\_Num2 = (Button)findViewById(R.id.***Btn\_Num2***);  
 Btn\_Num3 = (Button)findViewById(R.id.***Btn\_Num3***);  
 Btn\_Addition = (Button)findViewById(R.id.***Btn\_Addition***);  
  
 Btn\_Num0 = (Button)findViewById(R.id.***Btn\_Num0***);  
 Btn\_DecimalPoint = (Button)findViewById(R.id.***Btn\_DecimalPoint***);  
 Btn\_Equal = (Button)findViewById(R.id.***Btn\_Equal***);  
  
 Btn\_C.setOnClickListener(**this**);  
 Btn\_Back.setOnClickListener(**this**);  
 Btn\_ModuloDivision.setOnClickListener(**this**);  
 Btn\_Division.setOnClickListener(**this**);  
 Btn\_Num7.setOnClickListener(**this**);  
 Btn\_Num8.setOnClickListener(**this**);  
 Btn\_Num9.setOnClickListener(**this**);  
 Btn\_Multiplication.setOnClickListener(**this**);  
 Btn\_Num4.setOnClickListener(**this**);  
 Btn\_Num5.setOnClickListener(**this**);  
 Btn\_Num6.setOnClickListener(**this**);  
 Btn\_Subtraction.setOnClickListener(**this**);  
 Btn\_Num1.setOnClickListener(**this**);  
 Btn\_Num2.setOnClickListener(**this**);  
 Btn\_Num3.setOnClickListener(**this**);  
 Btn\_Addition.setOnClickListener(**this**);  
 Btn\_Num0.setOnClickListener(**this**);  
 Btn\_DecimalPoint.setOnClickListener(**this**);  
 Btn\_Equal.setOnClickListener(**this**);  
 }  
}