```
1 package com.example.steve.qa assignment03;
 2
 3 import android.support.v7.app.AppCompatActivity;
 4 import android.os.Bundle;
 5 import android.view.View;
 6 import android.widget.Button;
7 import android.widget.TextView;
8 import android.widget.Toast;
9
10 public class MainActivity extends AppCompatActivity {
11
12
       public enum Ops {
13
           PLUS ("+"),
           MOINS("-"),
14
15
           FOIS ("*"),
16
           DIV("/");
17
18
           private String name = "";
19
           Ops(String name) { this.name = name; }
20
           public String toString() {return name;}
21
       }
22
23
24
       private TextView screen;
25
       private int op1=0;
26
       private int op2=0;
27
       private Ops operator=null;
28
       private boolean isOp1=true;
29
30
       @Override
31
       protected void onCreate(Bundle savedInstanceState) {
32
           super.onCreate(savedInstanceState);
           setContentView(R.layout.activity main);
33
34
35
           screen = (TextView) findViewById(R.id.screen);
36
           Button btnEgal = (Button)findViewById(R.id.btnEgal
   ) ;
37
           btnEgal.setOnClickListener(new View.
   OnClickListener() {
38
               @Override
39
               public void onClick(View v) {
40
                   compute();
41
               }
42
           });
43
```

```
44
           Button btnClear = (Button)findViewById(R.id.
   btnClear);
45
           btnClear.setOnClickListener(new View.
   OnClickListener() {
46
               @Override
47
               public void onClick(View view) {
48
                    clear();
49
                }
50
           });
51
       }
52
53
54
       private void updateDisplay() {
55
           int v=op1;
           if(!isOp1) {
56
57
               v=op2;
58
           }
59
60
           screen.setText(String.format("%9d",v));
61
       }
62
63
64
       public void compute() {
65
           if(isOp1) {
                // do nothing
66
           } else {
67
68
                switch(operator) {
69
                    case PLUS
                               : op1 = op1 + op2; break;
70
                    case MOINS : op1 = op1 - op2; break;
71
                    case FOIS : op1 = op1 * op2; break;
72
                                : op1 = op1 * op2; break;
                    case DIV
73
                    default : return; // do nothing if no
   operator
74
                }
75
76
                op2 = 0;
77
                isOp1 = true;
78
                updateDisplay();
79
           }
80
       }
81
82
83
       private void clear() {
84
           op1 = 0;
85
           op2 = 0;
```

```
86
            operator = null;
 87
            isOp1 = true;
            updateDisplay();
 88
 89
        }
 90
 91
        public void setOperator(View v) {
 92
            switch (v.getId()) {
                case R.id.btnPlus : operator=Ops.PLUS;
 93
   break;
 94
                case R.id.btnMoins : operator=Ops.MOINS;
   break;
 95
                case R.id.btnFois : operator=Ops.FOIS;
   break;
 96
                case R.id.btnDiv : operator=Ops.DIV;
   break;
 97
                default:
 98
                    Toast.makeText(this, "Opérateur non
    reconnu", Toast.LENGTH LONG);
 99
                    return; // do nothing if no operator
100
101
            isOp1=false;
102
            updateDisplay();
103
        }
104
105
106
        public void addNumber(View v) {
            try {
107
108
                int val = Integer.parseInt(((Button)v).
    getText().toString());
109
                if (isOp1) {
110
                    op1 = op1 * 10 + val;
111
                    updateDisplay();
                } else {
112
113
                    op2 = op2 * 10 + val;
114
                    updateDisplay();
115
                }
            }catch (NumberFormatException |
116
    ClassCastException e) {
                Toast.makeText(this, "Valeur erronée", Toast.
117
    LENGTH LONG);
118
           }
119
        }
120
121 }
122
```