

RPN Calculator Installation/User Manual

Installation

The .zip file you downloaded contains the RPN calculator code.

To start RPN Calculator program, apply the following steps;

- Extract the ZIP file
- Open the directory, extracted from ZIP file, in Eclipse
- In Eclipse, under the Package Explorer section, right click on the gokhan.ustuner directory and then click Run As > Java Application. Then, just choose Tester or Calculator, and press OK.

Tests

Test suites are inside Tester class. They are shown in the image below;

```
public class Tester {  
    public static void main(String[] args) throws IOException {  
        RPN rpn = new RPN();  
        rpn.apply( expression: "1");  
        rpn.apply( expression: "4");  
        assert rpn.apply( expression: "+") == 5.0;  
  
        rpn = new RPN();  
        rpn.apply( expression: "745");  
        rpn.apply( expression: "134");  
        rpn.apply( expression: "543");  
        assert rpn.apply( expression: "-") == -409;  
        assert rpn.apply( expression: "*") == -304705;  
  
        rpn = new RPN();  
        rpn.apply( expression: "111");  
        assert rpn.apply( expression: "c") == -111;  
        assert rpn.apply( expression: "c") == 111;  
        rpn.apply( expression: "c");  
        rpn.apply( expression: "24");  
        assert rpn.apply( expression: "+") == -87;  
  
        rpn = new RPN();  
        rpn.apply( expression: "1");  
        rpn.apply( expression: "2");  
        rpn.apply( expression: "+");  
        rpn.apply( expression: "3");  
        rpn.apply( expression: "+");  
        rpn.apply( expression: "4");  
        assert rpn.apply( expression: "+") == 10;  
    }  
}
```

How to use?

As you run the source code as a Java application, you will be prompted for a number by the console as shown below;

Start to enter numbers, operators, and press to enter. It is shown in the image below;

Exceptions

Invalid both input exceptions and empty

stack exceptions are caught on the code side. You are just warned, and the loop continues.

`IOException: Invalid expression!`

`EmptyStackException: Stack is empty.`