

CSC1850 Object-oriented Programming (Fall 2025)

Homework Assignment 10

(10 points)

Due Date: Tuesday, Nov. 11 before midnight

1 (5 point)

Calculator.java, is a simple command-line calculator.

Note the program terminates if any operand is nonnumeric.

Write a program with an exception handler that deals with nonnumeric operands; then write another program without using an exception handler to achieve the same objective.

Your program should display a message that informs the user of the wrong operand type before exiting.

```
1 public class Calculator {  
2     /** Main method */  
3     public static void main(String[] args) {  
4         // Check number of strings passed  
5         if (args.length != 3) {  
6             System.out.println(  
7                 "Usage: java Calculator operand1 operator operand2");  
8             System.exit(1);  
9         }  
10        // The result of the operation  
11        int result = 0;  
12  
13        // Determine the operator  
14        switch (args[1].charAt(0)) {  
15            case '+': result = Integer.parseInt(args[0]) +  
16                            Integer.parseInt(args[2]);  
17                            break;  
18            case '-': result = Integer.parseInt(args[0]) -  
19                            Integer.parseInt(args[2]);  
20                            break;  
21            case '.': result = Integer.parseInt(args[0]) *  
22                            Integer.parseInt(args[2]);  
23                            break;  
24            case '/': result = Integer.parseInt(args[0]) /  
25                            Integer.parseInt(args[2]);  
26                            break;  
27        }  
28  
29        // Display result  
30        System.out.println(args[0] + ' ' + args[1] + ' ' + args[2]  
31            + " = " + result);  
32    }  
33 }
```

2 (5 points)

Write a program that counts the number of words in President Abraham Lincoln's Gettysburg address from <https://liveexample.pearsoncmg.com/data/Lincoln.txt>.