

# CS 270 Homework 1

Due Wednesday February 26

# Homework 1

Write a program that implements the following algorithm.

1. Ask the user to enter a value between 1 and 30. The value represents the number of elements in an array. Suppose the value entered is called  $x$ .
2. Read an array of  $x$  positive integers
3. Ask the user to enter a positive integer or -1 to quit. Suppose the value entered is called  $s$ .
4. While  $s$  is not equal to -1
  - 4.1 search for  $s$  in the array
  - 4.2 if  $s$  is found in the array print the number of times  $s$  is found in the array otherwise print "Not Found"
  - 4.3 Ask the user to enter another positive integer or -1 (again called  $s$ ) to quit

When the user enters a value for  $x$ , the program must make sure the value is between 1 and 30 inclusive. If the value is not in the required range, the program prints an error message and prompts the user to enter a value between 1 and 30. If the user fails three times to enter an acceptable value, the program prints an error message and quits. You do not have to check for any other errors.

# Homework 1

Enter the number of elements (between 1 and 30) in the array:

**42**

Enter the number of elements (the number MUST be between 1 and 30) in the array:

**6**

Enter 6 positive integers:

**7**

**5**

**10**

**49**

**5**

Enter a positive integer or -1 to quit:

**12**

Not Found

Enter a positive integer or -1 to quit:

**5**

Found 2 times

Enter a positive integer or -1 to quit:

**-1**

# Homework 1 Submission

- email me ([tgendreau@uwlax.edu](mailto:tgendreau@uwlax.edu)) only one file called h1.asm
- Put a comment in the first line of the file that includes your name
- You do not need to comment each line of code but you should have comments that explain the basic flow of the code