Questions: R-1.1, R-1.3, C-1.5

* R-1.1  For each of the following processes, state whether it meets the requirements for being considered an algorithm. Justify your answers.  (a) “Lather, rinse, repeat.” (b) “Follow your passion.” (c) The driving directions produced by a mapping website such as Google Local or Bing Maps. (d) A well-written recipe for chocolate chip cookies.

1. Lather, rinse, and repeat is an algorithm because it is described clearly enough to be implemented, if directions are followed, should produce a correct solution, and takes a finite amount of time for each step
2. Follow your passion is not an algorithm because it does not give a certain amount of time nor does it have any directions
3. The driving directions are an algorithm because it is a list of steps that if followed, should produce a correct solution
4. A well written recipe for chocolate chip cookies is an algorithm because it has steps listed and written.

* R-1.3  Write a definition for the problem of counting the number of space characters in a string.

Space Counter Problem:

Input: (str Input) A string of n length

Output: (int Spaces) The number of space characters in the string

* C-1.5  Write pseudocode for a straightforward algorithm that solves the string comparison problem.

Same = true

If string1.length == string2.length

For I to end of string1 length

If string1[i] does NOT equal string2[i]

Same = false

break

Else

Same = false

Return same