

ICS4U – More String Exercises

1. Write a java program (with a method) that accepts a string and determines the number of “triples” in a string. We'll say that a "triple" in a string is a char appearing three times in a row. Return the number of triples in the given string. The triples may overlap.

Example:

"abcXXXabc" → 1
"xxxabyyyycd" → 3
"a" → 0

2. Write a java program (with a method) that accepts a string and determines the sum of the individual numbers appearing in the string, ignoring all other characters. (Note: `Character.isDigit(char)` tests if a char is one of the chars '0', '1', .. '9'. `Integer.parseInt(string)` converts a string to an int.)

Example:

"abc123xyz" → 6 (1+2+3)
"aa11b33" → 8 (1+1+3+3)
"7 11" → 9 (7+1+1)

3. This is a more difficult version of the previous question. Write a java program (with a method) that accepts a string and determines the sum of the numbers appearing in the string, ignoring all other characters. Consecutive digits are treated as a single number. A number is a series of 1 or more digit chars in a row. (Note: `Character.isDigit(char)` tests if a char is one of the chars '0', '1', .. '9'. `Integer.parseInt(string)` converts a string to an int.)

Example:

"abc123xyz" → 123
"aa11b33" → 44 (11+33)
"7 11" → 18 (7+11)

4. Write a java program (with a method) that accepts 2 strings; “base” & “remove” and returns a version of the “base” string where all instances of the “remove” string have been removed. You may assume that the remove string is length 1 or more. Remove only non-overlapping instances, so with "xxx" removing "xx" leaves "x".

Example:

("Hello there", "llo") → "He there"
("Hello there", "e") → "Hllo thr"
("Hello there", "x") → "Hello there"