STRING & FUNCTIONS

EXERCISES :

1) Write a function which will return the number of found "words" and location (with the address and subscript value)
    E.g. for char *sentence = "How much wood would a woodchuck chuck?"   and address of "sentence" starts at 0x90000.
    You answer will be :

    Found "wood" at :
    0x900009 9
    0x900022 22

2) Write a function which will locate the last occurrence of a sub-string.

    E.g. use the last sentence as an example.

    Prototype of your function:

    char * strrstr(sentence, "wood")

    it will return the address of the last "wood".   That is:

    0x900022

3) Write a function which will replace the sub-string; and print out the whole string.

     e.g.
    replace(char *sentence, char *oldStr, char *newStr)
    .
    You need to do that 2 tests:
    a) From "John" to "Al"
    b) From "John" to "Benjamin"

4) Write a function to remove all instances of "moo".
    a) Case 1:
        "Farmer John Loves moomoo cow.
        Should become
        "Farmer John Loves cow.

    b) Case 2:
        "Farmer John loves momomommmmooooooooooo cow.
        Should become
            "Farmer John Loves cow.

c) Case 3:
"Farmer John loves momomommmmoooooooooooo cow, but all the cows which do momomommmmooooomoooooo

Note that there is the last character of the string is "o".

5) There is an existing API atoi(string) converting the string to a number. However, this function is not a robust function because it's behavior is unpredictable if the input string has non-digit in it. You will need to create a new robust api called newAtoi(…). This function will :
   a. Provide a successful / failure status
   b. Provide the correctedly converted number in successful case.

You can create your newAtoi(…) prototype. That means you decide the arguments into the function as well as returning value.