Lab Task Recursion Sec B

Question 1:

Write a recursive function to reverse a string. Write a recursive function to reverse the words in a string, i.e., ”cat is running” becomes ”running is cat”.

Question 2:

Compute the sum of natural numbers until N using a recursive function.

Question 3:

Using a recursive function compute the Factorial of a number N . Fact(N) = N × (N −1) · · · 1.

Question 4:

(Use Recursion)
A word is considered elfish if it contains the letters: e, l, and f in it, in any order. For example, we would say that the following words are elfish: whiteleaf, tasteful, unfriendly, and waffles, because they each contain those letters.

- Write a predicate function called elfish? that, given a word, tells us if that word is elfish or not.
- Write a more generalized predicate function called x-ish? That, given two words, returns true if all the letters of the first word are contained in the second.

Question 5:

Write a recursive function for mutliply(a, b), where a and b are both positive integers, but you can only use the + or − operators.