Problem 1
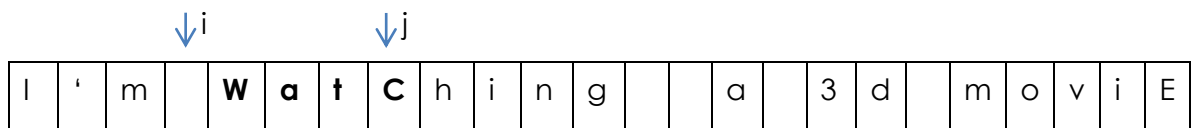

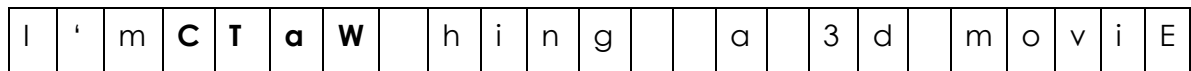
1. Write the function *subreverse* that takes a string T and two positions **i** and **j**, and reverses the characters of the string between i and j both included. Assume that **i** is less than **j**.
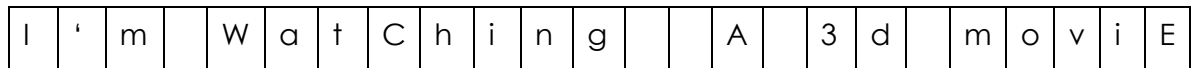
    Example: if T is

I	'	m		**W**	**a**	**t**	**C**	h	i	n	g		a		3	d		m	o	v	i	E

    And i=3, j=7

    After calling the function **subreverse,** T becomes:

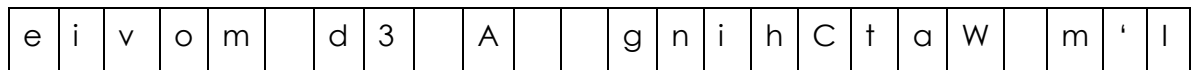 | | | | | | | | | | | | | | | | | | | |
    |---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
    | I | ' | m | **C** | **T** | **a** | **W** | | h | i | n | g | | a | | 3 | d | | m | o | v | i | E |

2. Using the function **subreverse**, write a function **reverse** that takes a string T and reverses it.

    Example: if T is

I	'	m		W	a	t	C	h	i	n	g		A		3	d		m	o	v	i	E

    After calling the function **reverse,** T becomes:

e	i	v	o	m		d	3		A		g	n	i	h	C	t	a	W		m	'	I

3. Write a main program that reads a string T of maximum 50 characters, reverse the string T (using the function **reverse**) and prints the resulted string.

Problem 2

Write a program that reads a sentence (as a string) and prints its words in increasing order based on their length. (use only the space character as separator).

Example: if sentence = "Hi My name is Jamil"

The program displays:

5 characters: Jamil

4 characters: name

2 characters: Hi My is