**Week 5 In-Class Exercises (Extra)**

**(Lists)**

**Q1: Reverse Words [ \*\* ]**

Write a function called reverse\_words() that takes in a piece of text that consists of multiple words. The function **returns** a string that is a transformed version of the text where each word is reversed.   
  
You can assume that the words in the given text are separated by spaces, i.e., there is a single space between two adjacent words.

For example, reverse\_words("I study at SMU") returns "I yduts ta UMS". reverse\_words("Python is a programming language.") returns "nohtyP si a gnimmargorp .egaugnal". If the input text is an empty string, the function returns an empty string.

**Q2: Average Height [ \*\*\* ]**

Write a function called compute\_avg\_height. The function takes in a single parameter, which a string that consists of some people’s heights. An example of such a string is "Jonathan Li:1.75m, Lim, Josephine : 1.59m , George Khoo: 1.7 m". We can see that for each person, the person’s name is given, followed by a colon. After that there may be zero, one or more spaces, followed by the person height. The person’s height is followed by the letter 'm', but there might be zero, one or more spaces before 'm' and after 'm'. The function compute\_avg\_height should return the average height of all the people listed in the string.

You can assume that the input string is always well formatted as described above. To be more specific, you can assume the following:

* Digits and the symbol '.' appear only as part of a person’s height.
* A person’s name doesn’t contain the symbol ':'.
* However, a person’s name may be expressed as '<surname>, <given name>', such as 'Lim, Josephine'.
* The string parameter contains at least one person’s height.