

Classwork 1

1) Define a function **MaxOfThree()** that takes three numbers as arguments and returns the largest of them (Use **if**, **elif** and **else**).

For example, **MaxOfThree**(1, 2, 3) should return 3.

2) Define a function **MySum()** and a function **MyMultiply()** that sums and multiplies (respectively) all the numbers in a list of numbers (Use **for**).

For example, **MySum**([1, 2, 3, 4]) should return 10, and **MyMultiply**([1, 2, 3, 4]) should return 24.

3) Define a function **MyMean()** that receives an unknown amount of input values from a user and returns the mean value of all the input values (Use **while**), continuo receiving values as long the user insert numerical values.

For example: if the user provides [1, 2, 3, 4], the **MyMean()**, should return 2.5

Hint:

Think what char array representing a numerical value can contain.

4) Define a function **MyStars()** that takes a list of integers and prints a string of stars which has the length of a value of an integer to the screen.

For example, **MyStars**([3, 9, 7]) should print the following:

Hint:

Use concatenation

5) Define a function **SecondBest()** that receives a list of numbers and returns the second largest and second smallest numbers.

For example, **SecondBest**([1, 2, 3, 4]) should return [3, 2] (do not use built in functions such as max or sort).

Challenge:

Can you do this in a single pass on the array?

6) Define a function **MySort()** which receives a list of characters and returns a sorted list of same characters.

For example: **MySort**(['a','c','v','b','b','a']) should return ['a', 'a', 'b', 'b', 'c', 'v'] (do not use built in sort functions)

7) Define a function **MyChar2Num()** which receives a list of characters and returns a numbers representing the place of the letter in the alphabet.

For example: **MyChar2Num**(['a','c','z','b','b','a']) should return [1, 3, 26, 2, 2, 1].

Challenge:

Can you solve it in a single line?