# Python 1

1. Create a dictionary data structure containing fields/value pairs such as name/string, age/int, major/string and courses/list of strings. Then use a for loop to print out all the key/value pairs in the dictionary
2. Write a Python program to count the number of even and odd numbers in an input list of numbers.

The input should be a list of numbers: numbers = [0,1,2,3,4,5,6,7,8]

the output should look something similar to:

('Number of even numbers :', 5)

('Number of odd numbers :', 4)

1. Write a Python function that takes a list and returns a new list with the unique elements of the first list.

The input should be a list of numbers with some repeated elements: numbers = [1,2,3,3,3,3,4,5]

the output should look something similar to:

[1, 2, 3, 4, 5]

1. Write a function which can compute the factorial of a number given by the user. The results should be printed to the console. In mathematics, the factorial of a non-negative integer n, denoted by n!, is the product of all positive integers less than or equal to n. For example:



1. Write a Python functions that determines the length of an input argument string. If the argument is smaller or equal to 3 characters, the functions adds the suffix 'ly' to the input argument string and returns the extended string. If the input argument is longer than 3 characters, the functions adds the suffix 'ing' to the input argument string and returns the extended string. Example if the function is called extendedString:
   1. extendString(ab)---->returns ably
   2. extendString(abcd)---->returns abcing