

# Python Homework 03

# Tasks

1. Write a function that generates a random **MAC** address. The function does not receive any arguments and returns a string that contains the random address.  
   1. Ask the user for a number of addresses to generate and for a name of a file. Save the generated addresses into that file.
2. Write a script that reads text from a file and print the number of words in that file.  
   1. Modify the script to also print the average length of all the words in the file. (Do not count the new line ‘\n’)
3. Write a function that takes a list of integers as an argument and returns the same list but sorted.  
   For this task you are not allowed to use **sort()/sorted() OR ANY OTHER BUILT IN SORTING FUNCTION/METHOD.**Assume that all the numbers in the list are greater than zero.
4. Write a script that asks the user for a filename and a letter. Then print all the words from the file that start with that letter. Make sure to ignore the cases (uppercase/lowercase).