

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.
 - a. 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.
 - a. 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).