CODING EXERCISES

FILES

Remember: You open a file like this:
f = open("filename.txt", "rt")

The letters "rt" specify what you want to do with the file and what kind of data you work with:
"r" - Read - open a file for reading
"a" - Append - open a file for appending, creates the file if it does not exist
"w" - Write - open a file for writing, creates the file if it does not exist
"x" - Create - create a new file
The second letter specifies if you are dealing with text or other data:
"t" - Text
"b" - Binary - Binary mode (such as images)

Reading content from a file:
f.read() # reads the entire file
f.readline() # reads 1 line of the file

Writing content to a file:
f.write("some content here") # writes the content to the file

Closing a file: You should always close a file after you are done using it:
f.close()

Exercise 1: Create a function that generates random names and ages. The function should be flexible enough to generate any number of names that the user specifies.
Name generation: Create 4 letter names that consist of a random consonant, a random vowel, a random consonant and a random vowel. Make sure that every name you save is unique.
Age generation: The age should be between 1 and 100.
Save the people you generate in a CSV-file. Think about what the format should look like.

Exercise 2: You are working for a political party which is interested in contacting all people of legal voting age.
A) Write a function that counts the number of people in the file you created in exercise 1.
B) Write a function that shows you the name of all people of legal voting age from the file you created in exercise 1.
C) Write a function that shows you the average age of all people of legal voting age from the file you created in exercise 1.
D) Write a function that sorts the names in the file you created in exercise 1 alphabetically.