

Your submission for this tutorial must include your full name and you nine-digit student number as a comment at the top of every source file you submit. All source code files must be written using the Python 3 programming language.

Unlike your previous tutorials, this tutorial must be completed individually. Each student is required to make their own unique submission for this activity, and shared submissions will be treated as incidents of academic misconduct.

"Ethical Considerations"

Start by asking ChatGPT to provide you with a list of 51 surnames, sorted alphabetically. Identify the three names that occur at the 25%, 50%, and 75% point in the sorted list (i.e., at indices 12, 25, and 38, respectively). Now ask ChatGPT to write you a function that, when passed a string as an argument, tells you if that string should be sorted to a position before the 25% name, between the 25% and 50% name, between the 50% and 75% name, or after the 75% name. Ensure that your ChatGPT function doesn't use the entire list – just the three names you identified – and make sure the function is commented and type-hinted. Make sure you also specify the function name and that the programming language must be Python 3, and direct ChatGPT to include a code comment about the licensing terms or usage restrictions associated with the generated code.

Once you have a working function satisfying these requirements, write (without ChatGPT) a main function that either (a) checks for a string provided as a command-line argument and either calls the function or displays instructions (if the argument was not provided), or (b) uses a postcondition loop and the input function to allow the user to check as many names as they like, one-at-a-time.

Now answer the following two questions as comments included at the top of your code submission (after the comments that indicate your full name and your nine-digit student number):

1. Do you actually believe the licensing information comment provided to be accurate? What do you think the ramifications might be of code generated by proprietary training data?
2. Do you think the names you requested exhibit bias towards a particular ethnicity? Try asking for another 51 names but this time indicate you want surnames originating from Scotland, China, Russia, or Japan (your choice). Include both lists of names as comments in your code.

In order to complete this task, you will need to:

- have an account with OpenAI to allow you to interact with ChatGPT

Your submission for this exercise:

- must include a source code file¹ with filename² `'comp1405_f23_#####_tutorial_08.py'`
- must **also** include a **complete** transcript of your conversation with ChatGPT³

¹ It is critical that you verify the source file for correctness, including the components provided by ChatGPT.

² You must replace the number signs in the filename with your official nine-digit student identification number.

³ Create this transcript by copying -and-pasting the complete page into either a Microsoft Word or a Google Document