

Comparison between AI Code and Manually written code

The code from **GitHub Copilot** uses Python's built-in **sorted()** function. This method is short, clean, and very fast. It uses a **lambda** function to pick the value to sort by, and handles missing keys safely using **.get()**.

The manual version we wrote uses a basic sorting algorithm called selection sort. It goes through the list step by step, finding the smallest value each time and swapping items. This works fine, but it's slower, especially for big lists, and it takes more lines of code to do the same thing.

In real projects, the AI-generated code is better because:

- It runs faster (especially with large data),
- It's easier for other developers to read and understand,
- It saves time: Copilot wrote it in seconds.

However, writing the manual version helped us understand how sorting works under the hood. It's important to know what the AI is doing, so you can catch mistakes or improve it if needed.

Copilot's version is more efficient and professional, but learning the manual method builds deeper understanding.