**Why is Lean 4 taking so long to run? What can I do about it?**

Lean 4 can sometimes feel slow due to initialization overhead or repeated recompilation. To mitigate this, consider the following:

- **Use LeanInteract:**
  The [LeanInteract](#) package can significantly speed up interactions after the initial startup. This can be used to replace the compilation system call of `execute_lean_code`.
- **Set up a specialized error-resolution agent:**
  Creating a dedicated agent for error handling instead of relying on system calls. This agent can use a Retrieval-Augmented Generation (RAG) database populated with `(error, resolution)` pairs.
- **Leverage lean4web for fast compilation:**
  Use [lean4web](#) as a lightweight server to compile Lean code snippets and capture outputs. These outputs can then be added to your RAG database for faster and more intelligent error resolution. Note that this requires you to **manually copy and paste outputs from the LLM agent into the website.** Please **do not use** any scraping / browser automation tools.

For task 1, our fully implemented program has to be >= 30 lines. Since we need to submit 2 problems, is 30 lines the total line for 2 problems (15 lines in average for each problem)? Or it must be at least 30 lines for each problem (total 60 lines for 2 problems?

- The "30 lines" is referring to the whole task.lean file for a *single* datapoint