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● Connecting the dots ●
Simplifying complexity

Qualifying Assignment – Agentic AI Internship

This is your assignment to qualify for the teleconference round.

The Task
You are required to:
1. Migrate the code in the following repository to Python: https://github.com/rikyoz/bit7z
2. Package the migrated code as a Python utility named NinjaZipPy.
3. Ensure that NinjaZipPy can:
   ○ Zip files/folders into .7z format.
   ○ Unzip .7z archives into folders.
4. The use of an LLM for code migration is mandatory.
5. Don't migrate the tests.

What We're Testing
1. Your ability to use LLMs as a coding assistant for large-scale migration.
2. Your ability to build a Python package/utility that runs from the terminal.
3. Your ability to work with compression libraries and file I/O in Python.
4. Important: Comfort with Unix/Linux environments.
5. Important: Your ability to take a C++ codebase and transform it into Python logic.

What We're Not Testing
1. A line-for-line manual rewrite of the original code.
2. Fancy documentation or branding.
3. 100% feature parity with the original repo.

What to Submit
Respond to this email with:
1. A GitHub repo link with your migrated code (NinjaZipPy).
2. A Google Drive link to a short demo video (≤5 mins) showing:
   ○ Zipping and unzipping files using your Python utility.
3. A PDF write-up (1–2 pages) describing:
   ○ How you used LLMs in the migration.
   ○ Key design choices you made.
   ○ Limitations or issues encountered.

Deadline

120 hours from the time you receive this email.
If you have clarifying questions, ask your LLM, friends, seniors, cousins, or the Internet.
There will be no response from us.

This is open book, open Internet, open whatever.
Welcome to the real world of problem-solving.
Your curiosity and ability to learn by yourself are your greatest assets.

Best Regards,
Aniket Pingley, Ph.D.