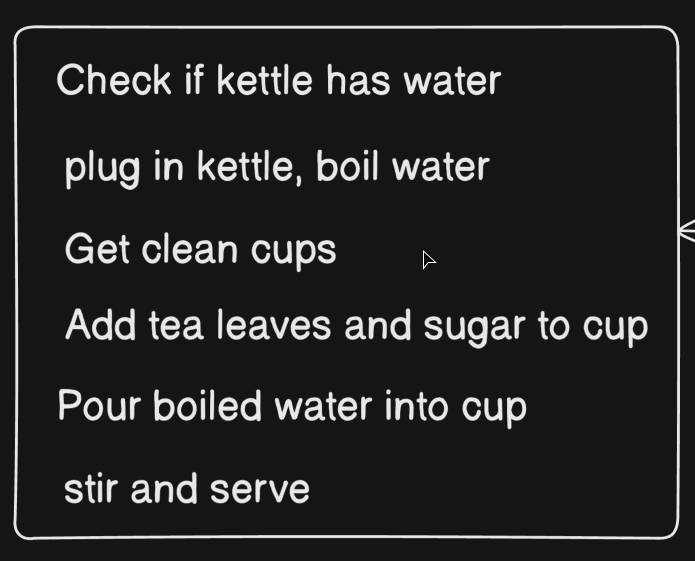
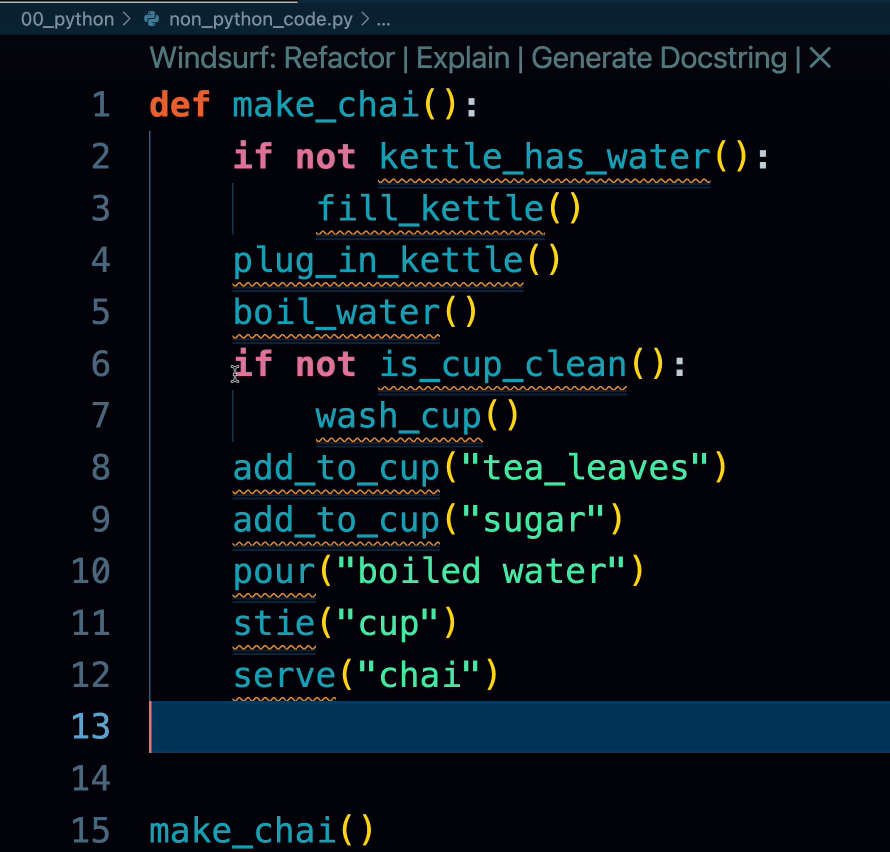
[Full-Stack AI with Python: LLMs, RAG, Agents & LangGraph](https://www.udemy.com/course/full-stack-ai-with-python/)

1. **Section 1: Introduction**
   1. **1. Installation of Tools (VSCode and Python)**
      1. IDE: Download VSCode.
      2. Install python latest version
         1. `python --version`
         2. In my cmd: Python 3.12.1
         3. In my WSL: Python 3.10.12
         4. Know the basic of python like variable, functions, math operations, classes
            1. `python` in terminal -> Open REPL
      3. Will use OpenAI, Gemini and other LLM’s. be aware of Chatgpt and have am account on openai. Will wak through on how to add credits in openai account.
   2. **2. VS Code Setup (Extensions and Themes)**
      1. Pylance, Ayu-miraj(theme) vscode extention
   3. **3. SRC code received**
2. **Section 2: Introduction to Coding world with python**
   1. **4. Meet your Instructor – Hitesh**
      1. Hitesh Intro
   2. **5. What is Programming..?**
      1. Install VS code
      2. <https://app.eraser.io>, <https://tldraw.com>, <https://excalidraw.com> -> drawing tool
      3. Programming –
         1. It’s about giving instructions to computer, especially the instruction that computer do understand.
         2. Computers can’t think on their own, including AI (just patterns & word completions).
         3. Requires precise instructions. Eg: making chai, we need to give set of instructions to make chai.
         4. Key Points on Coding Difficulty
            1. Is coding easy? → No and Yes.

Writing basic code: easy to start.

Becoming good programmer: takes months to years of effort.

* + - * 1. Coding is about problem breakdown and thinking process, not just writing syntax.
        2. Simple programs can be learned in a few months (Python & JavaScript more beginner-friendly).
  1. **6. Convert that into Python Code**
     1. Write recipes in code. Main code in each separate fx.
        1. Write this box items in python code.
           1. 
        2. Python code
           1. 
  2. **7. A Real World Python Code Intro**
     1. Python program terms
        1. Method/Functions -> Reusable piece of code in a fx.
        2. Class: contains methods/fxs
        3. Object: when class is initialized
        4. Properties: attributes
     2. Eg program:
        1. not every class in Python needs to have an \_\_init\_\_ dunder method.
        2. In class we have to pass self as an argument in every fx.
        3. Code eg: refer [my\_code\00\_python\1\_non\_python\_shop.py](my_code/00_python/1_non_python_shop.py)
  3. **8. Why to use Python?**
     1. Easy lang, Readable
     2. Portable: same program runs on windows, mac, linux
     3. Productivity: python is slower than cpp/java but same task can be done very easily.
     4. Extensive support of free libraries.
     5. Multi-use lang: make fullstack apps, ML/AI/datascience, Automation.
     6. Chai level happiness.
  4. **9./10. Writing first Python code on MAC/Windows**
     1. You can use python REPL or .py files to write python code.
     2. `python3 --version` -> in terminal to see the python version
     3. <https://www.warp.dev/> -> AI CLI
  5. **11. Get everything in Virtual Environment**