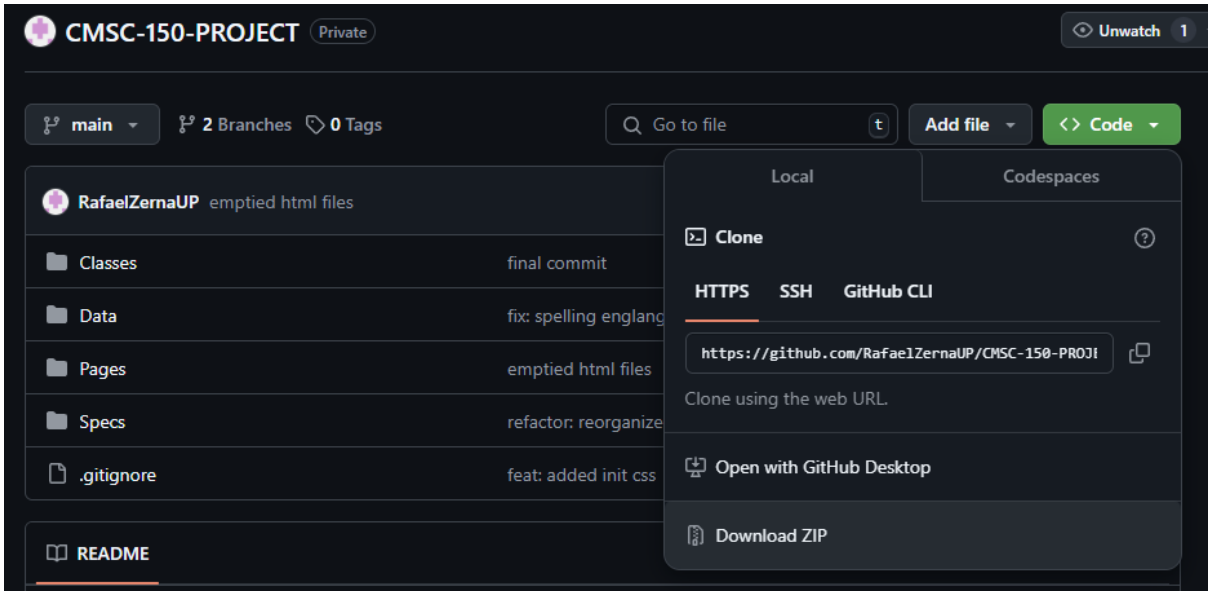
WELCOME TO THE DIET OPTIMIZER

Requirements:

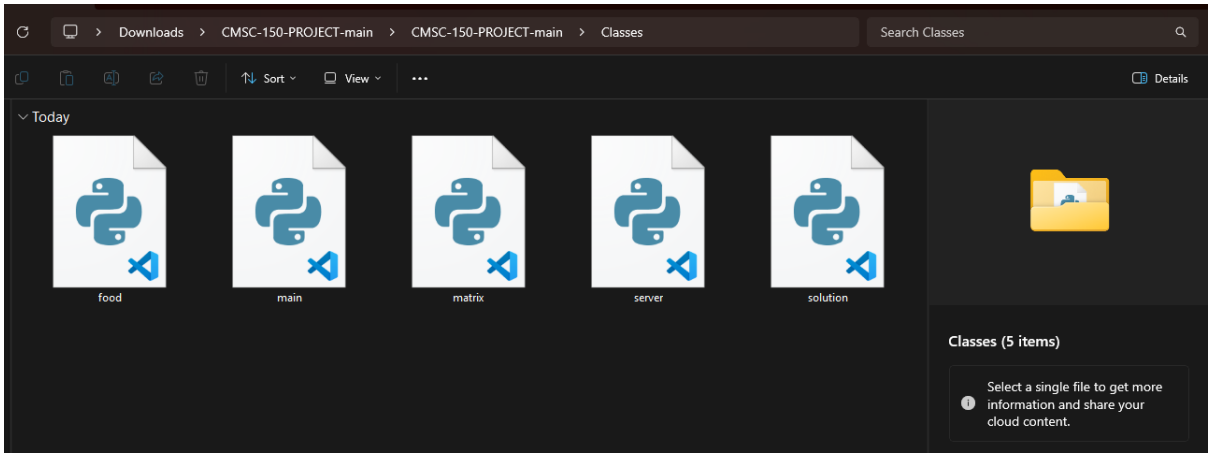
- PC with Python 3.12 or above
- Any Modern Browser

Opening the Program:

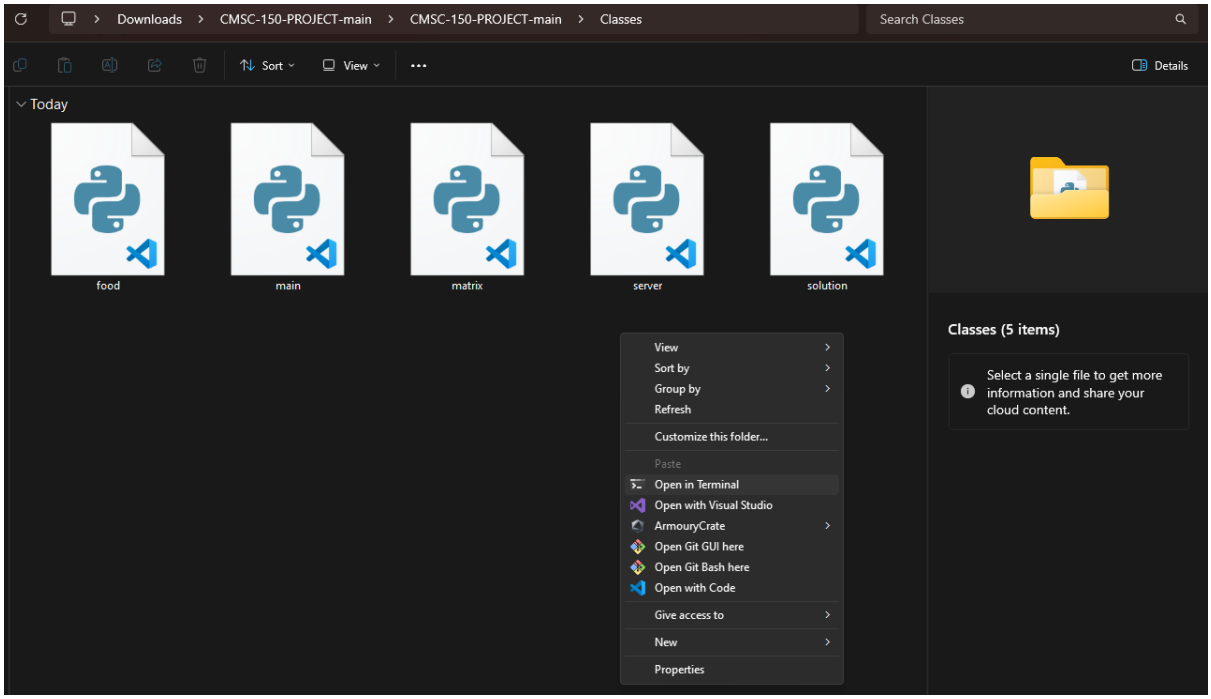


Download the Program at https://github.com/RafaelZernaUP/CMSC-150-PROJECT. To do this, proceed to the link and click on the green '<> Code' button. Then download the zip file of the program.

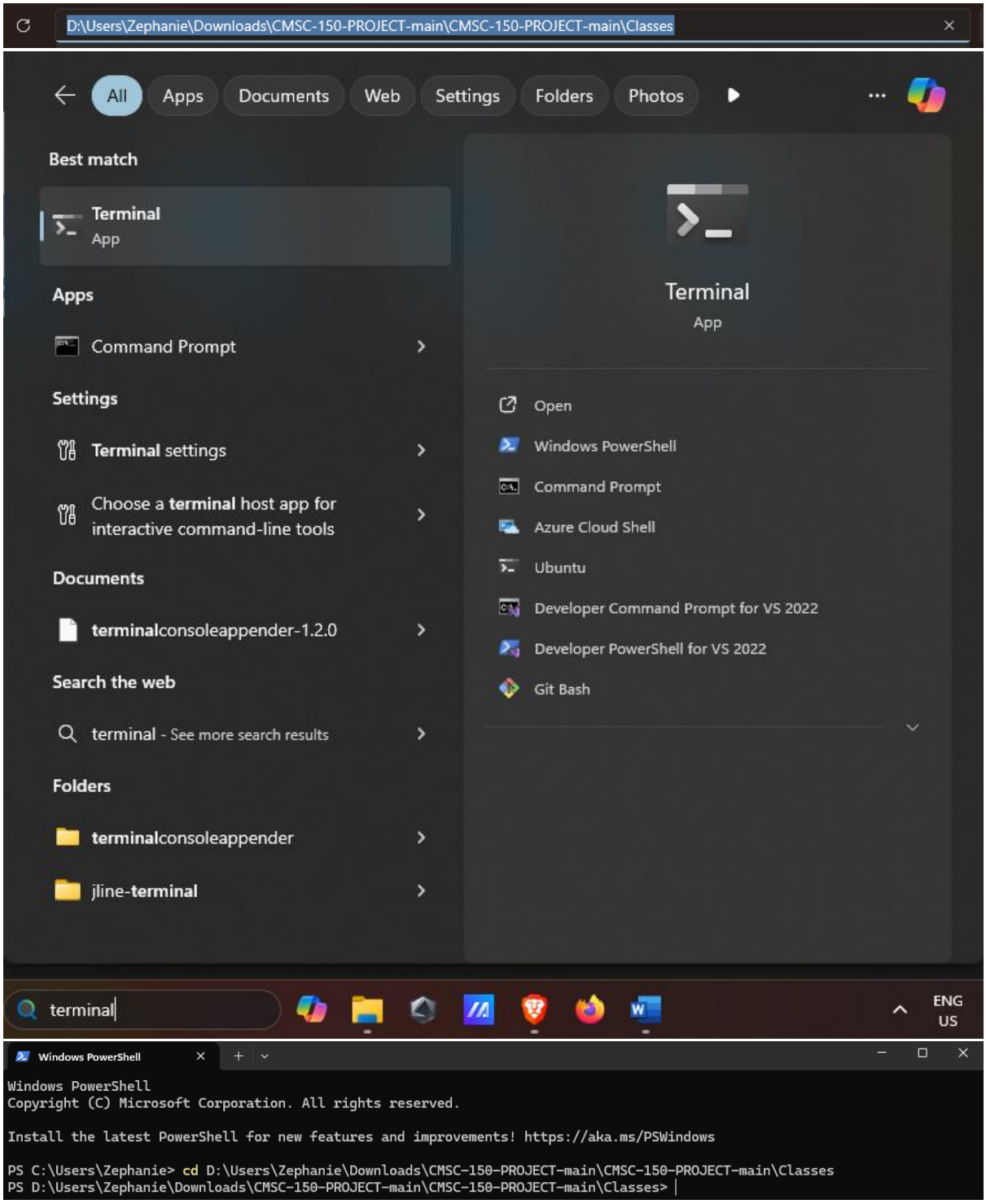
Locate the downloaded file and extract.



Enter the 'Classes' folder. Open 'PowerShell' or 'Terminal' in this folder.



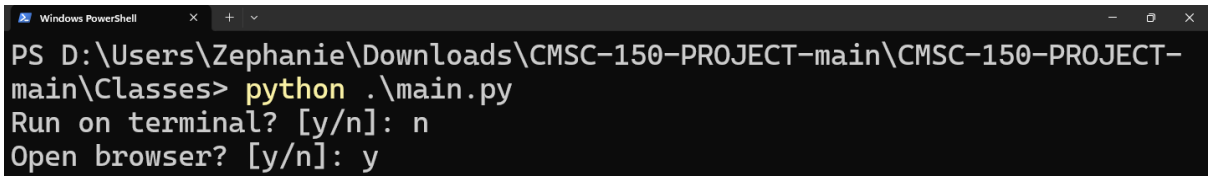
Do this either by right clicking the 'Classes' folder then clicking on "Open in Terminal/Windows PowerShell"



or opening the said programs using 'Search' then typing: cd [insert path to folder here].

Type "python" (space) then press the 'Tab' key until 'main.py' appears. Press Enter to continue.

The Running Program:



The program will then ask you if you wish to run on the terminal. Type 'y' if so. Else, type 'n' to proceed to the webpage. We recommend that you choose 'n' for a better user experience. Choosing 'n' will make the program ask whether to open your default browser to use the app. We recommend you choose 'y'.

Inside the webpage, there are plenty of foods to choose from to include in your diet. Click any that you wish. 'Reset' and 'Check All' buttons are available to much easier uncheck or check all the food options respectively. After checking, please click 'Solve' to proceed.

After clicking 'Solve', you will be provided a summary of your chosen foods. If the chosen foods can meet the basic dietary requirements, a cost for the optimal diet will be provided, along with the serving sizes for each of the chosen foods. Else, it will say that the chosen foods create an infeasible diet, meaning that you must choose a different set of foods. A 'Return to Menu' button is included. Clicking it will return you to the food chooser page. The solver's full solution is provided below for those who need it.

Infeasible Diet:

Return to Menu

You selected 5 foods to consider in your diet.

```
Roasted Chicken
Bagels
3.3% Fat, Whole Milk
Kielbasa, Pork
Malt-O-Meal, Choc
```

The problem is infeasible.

Feasible Diet:

Return to Menu

You selected 8 foods to consider in your diet.

```
Frozen Broccoli
Roasted Chicken
Bagels
3.3% Fat, Whole Milk
Kielbasa, Pork
Malt-O-Meal, Choc
Peanut Butter
Chicken Noodle Soup
```

The cost of this optimal diet is $2.85 per day.

Food	Servings	Cost($)
Frozen Broccoli	1.81	0.29
Roasted Chicken	0.11	0.09
Bagels	10.00	1.60
3.3% Fat, Whole Milk	3.67	0.59
Kielbasa, Pork	0.00	0.00
Malt-O-Meal, Choc	0.30	0.16
Peanut Butter	1.69	0.12
Chicken Noodle Soup	0.02	0.01