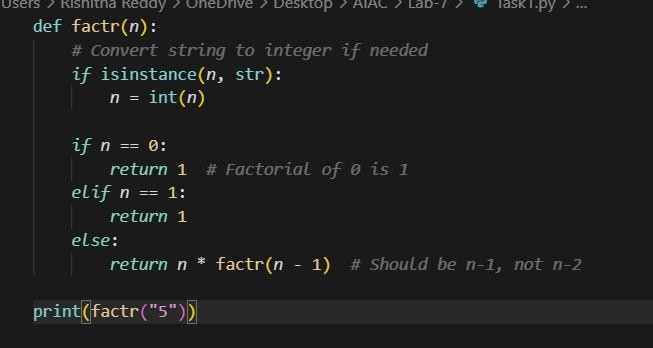
LAB-7.4

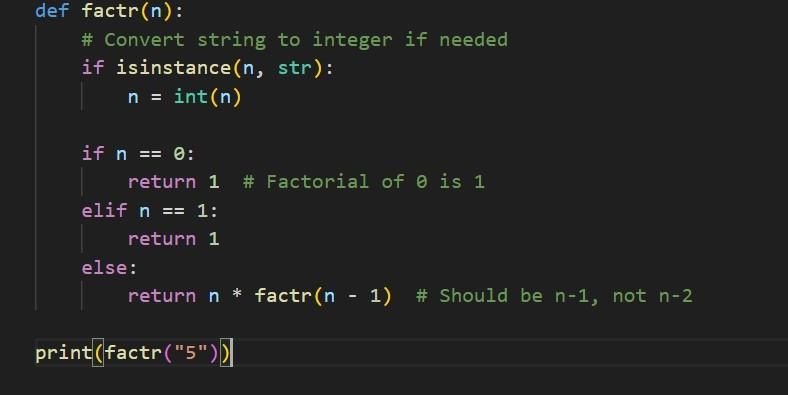
# Task Description #1:

* Introduce a buggy Python function that calculates the factorial of a number using recursion. Use Copilot or Cursor AI to detect and fix the logical or syntax errors.

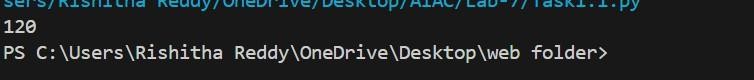


OUTPUT:



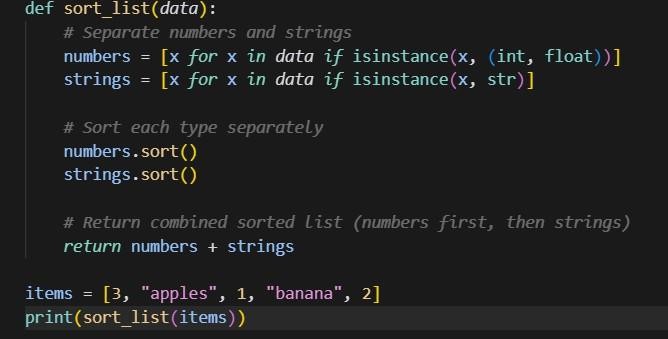


OUTPUT:

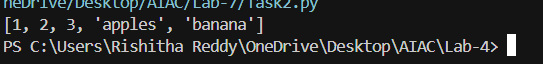


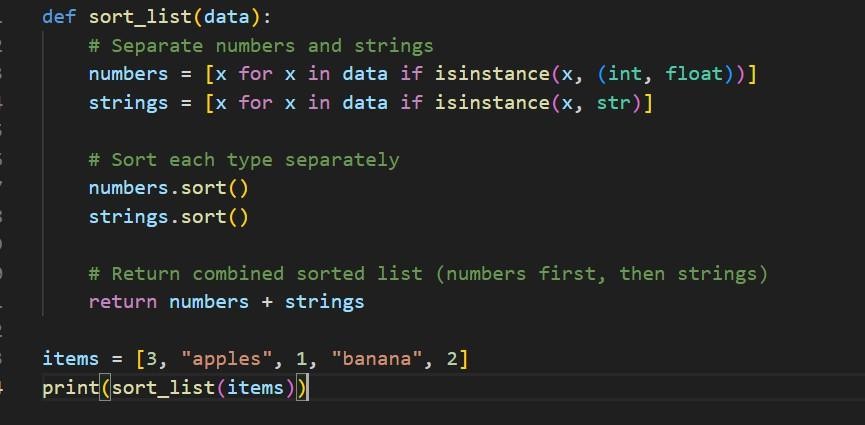
# Task Description #2:

* Provide a list sorting function that fails due to a type error (e.g., sorting list with mixed integers and strings). Prompt AI to detect the issue and fix the code for consistent sorting**.**

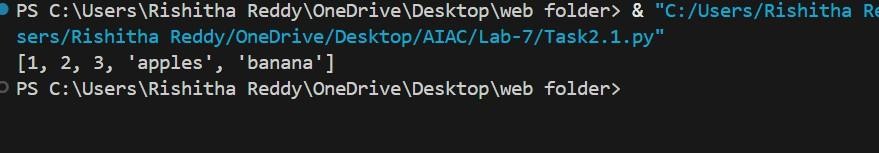
****

OUTPUT:



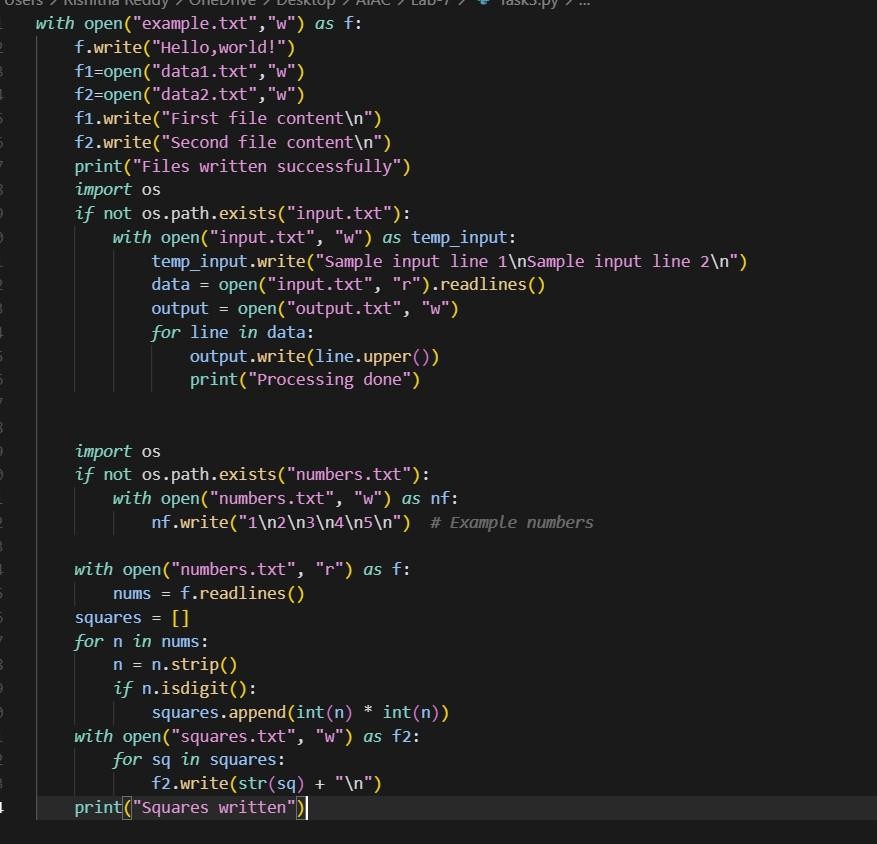


OUTPUT:

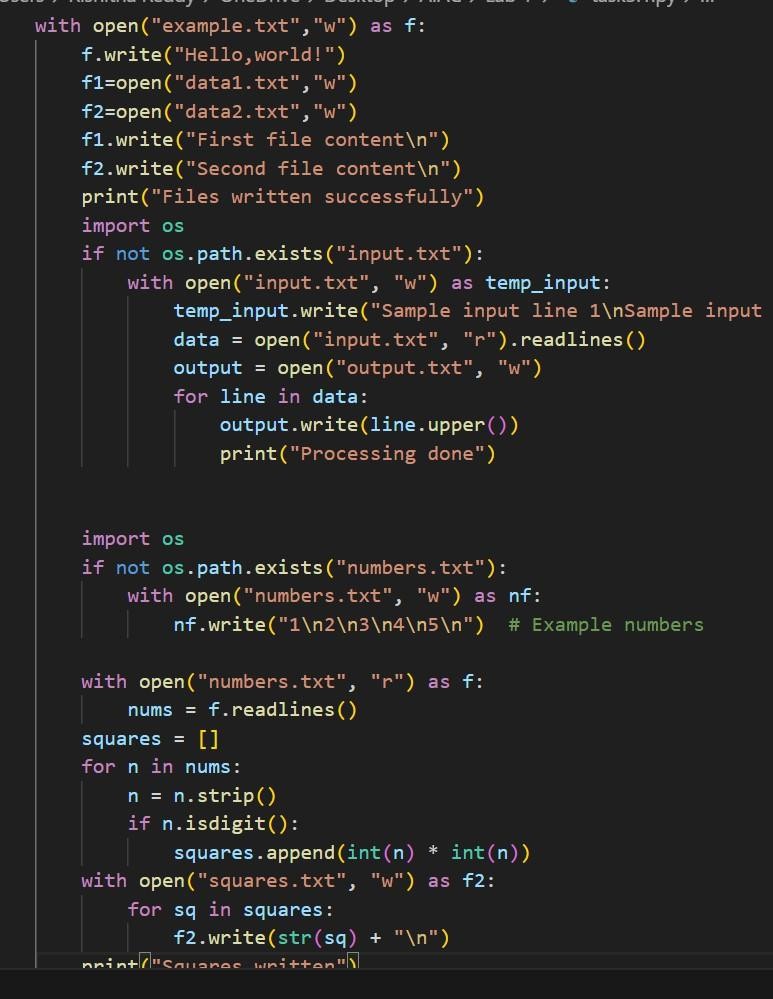


# Task Description #3:

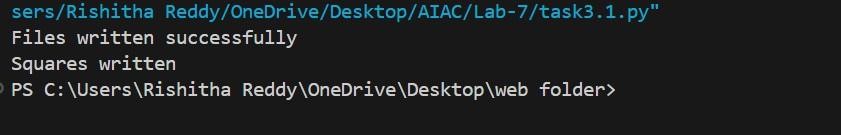
* Write a Python snippet for file handling that opens a file but forgets to close it. Ask Copilot or Cursor AI to improve it using the best practice (e.g., with open() block).



# OUTPUT:

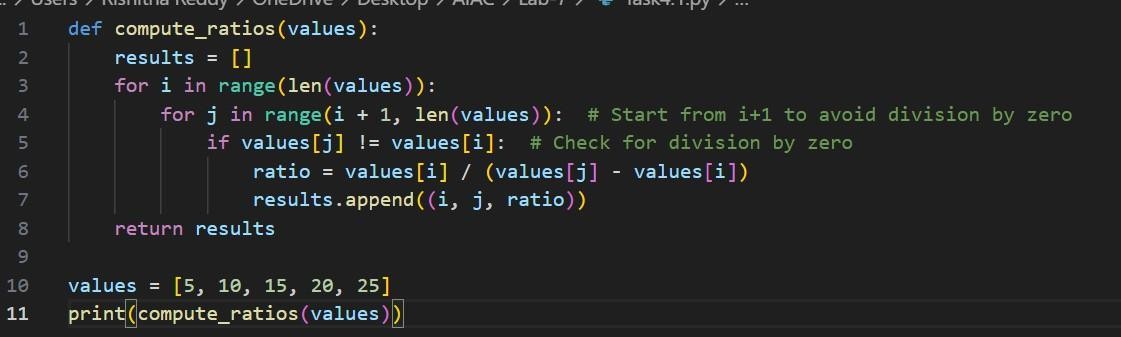
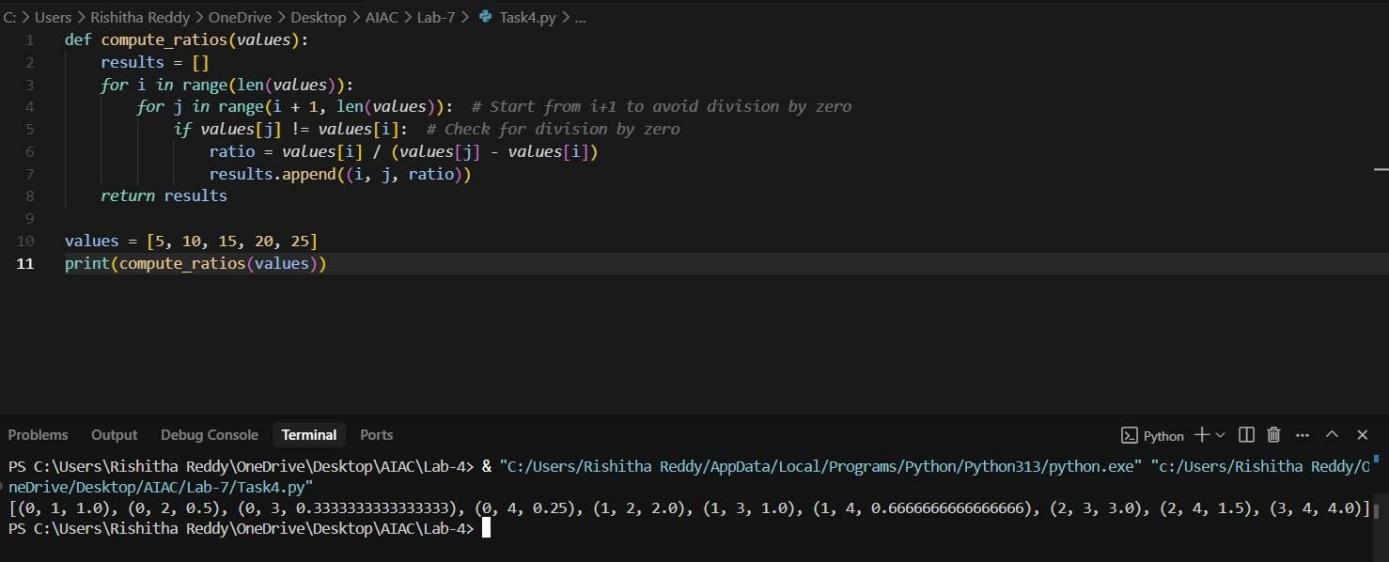


OUTPUT:

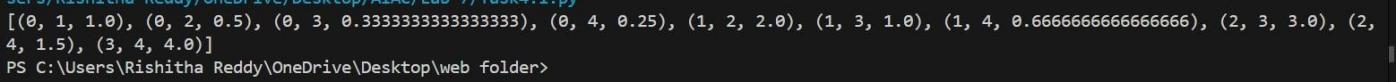


# Task Description #4:

* Provide a piece of code with a ZeroDivisionError inside a loop. Ask AI to add error handling using try-except and continue execution safely.

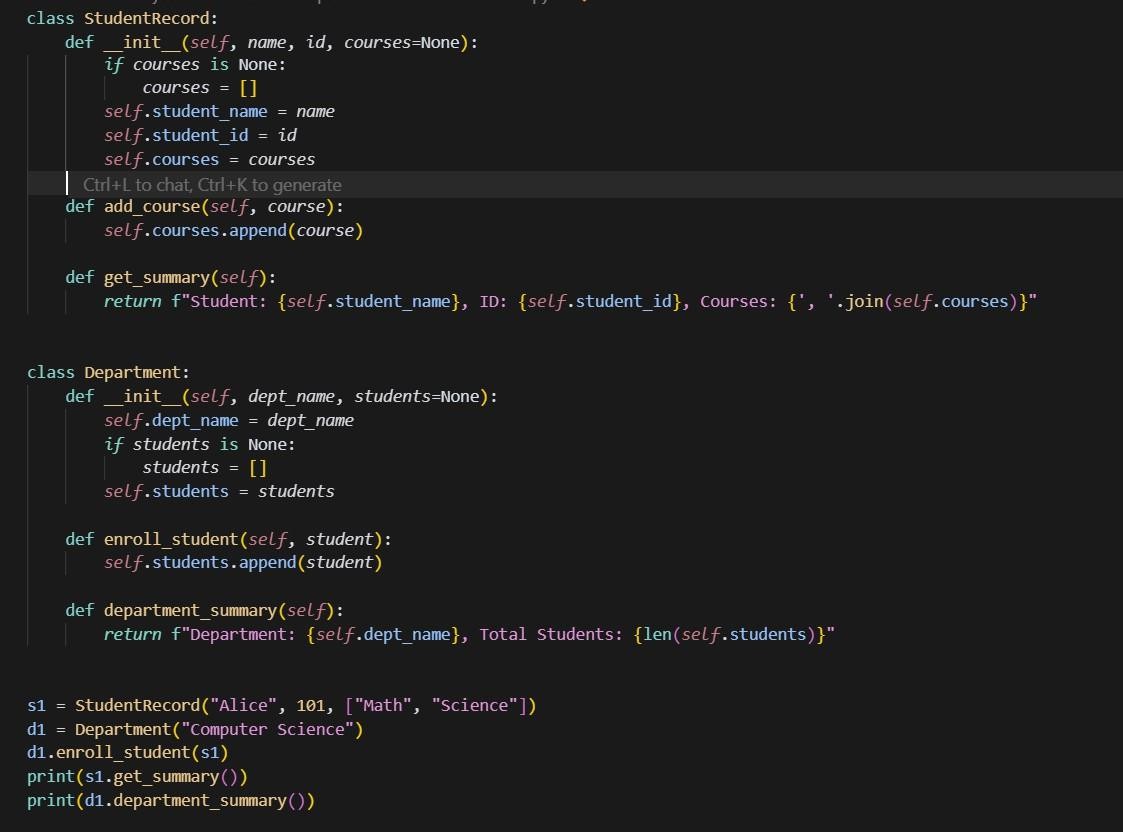


OUTPUT:



# Task Description #5:

* Include a buggy class definition with incorrect init parameters or attribute references. Ask AI to analyze and correct the constructor and attribute usage



OUTPUT:

