AI ASSISTED CODING LAB

ASSIGNMENT 7.4

LAB NAME : AI Assisted Coding

LAB NUMBER :7.4

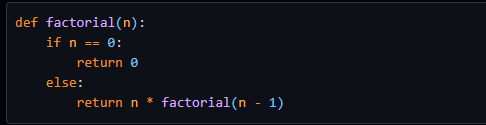
ROLL NUMBER :2503a51l05

BATCH NO :24BTCAICSB19

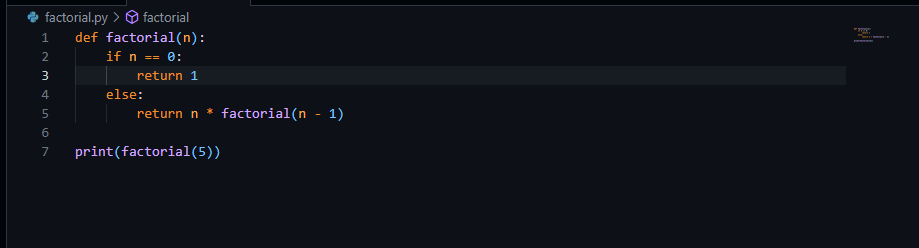
NAME OF STUDENT : N .SATYA SRI CHARAN

**TASK 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.

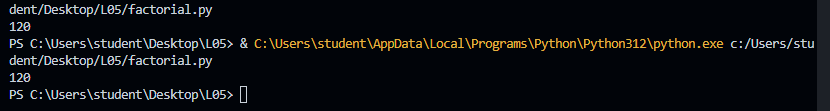
**PROMPT: Buggy version**

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**Fixed version:**

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**OUTPUT:**

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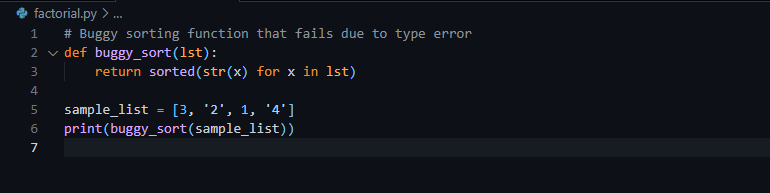
**TASK 2:** Provide a list sorting function that fails due to a type error (e.g., sorting list with mixed integers and strings). Prompt AI to detect the issue and fix the code for consistent sorting.

**PROMPT :**

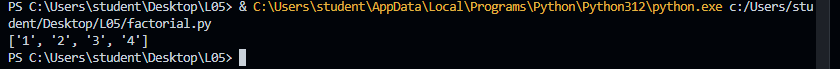
**Error version**

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**Fix the error**

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**OUTPUT:**

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**TASK 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).

**PROMPT:**

**BUGGY VERSIONS**

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**FIX THE BUGGY**

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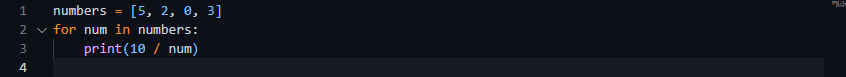
**OUTPUT:**

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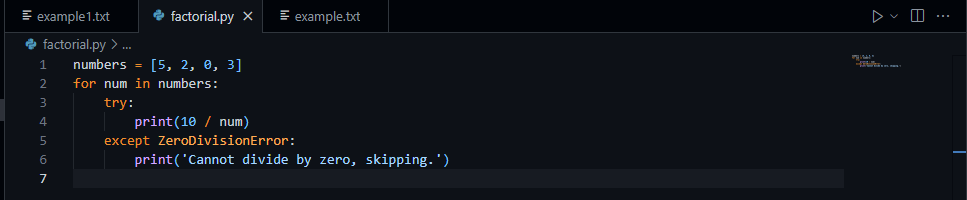
**TASK 4:** Provide a piece of code with a ZeroDivisionError inside a loop. Ask AI to add error handling using try-except and continue execution safely.

**PROMPT:**

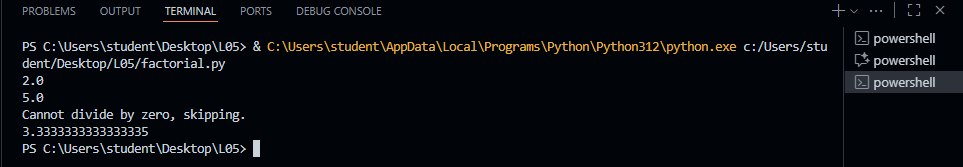
**ERROR VERSIONS**

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**FIX THE ERROR VERSION**

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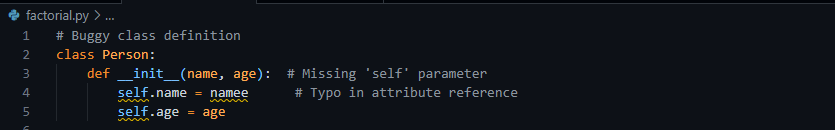
**OUTPUT:**

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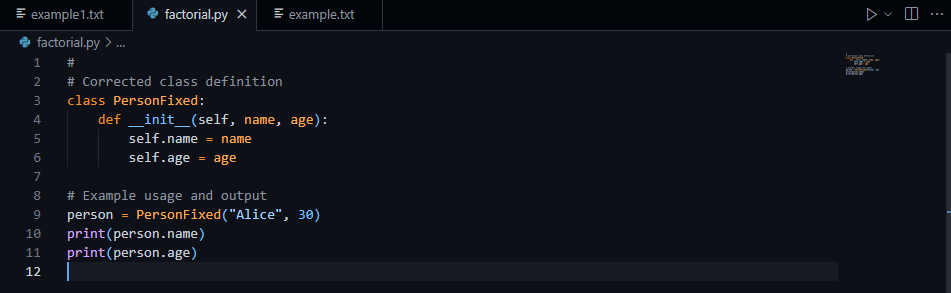
**TASK 5:** Include a buggy class definition with incorrect \_\_init\_\_ parameters or attribute references. Ask AI to analyze and correct the constructor and attribute usage.

**PROMPT:**

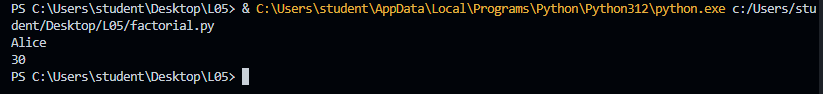
**ERROR VERSION**

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**FIX THE ERROR**

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**OUTPUT**

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