Assignment – 4.5

Hall Ticket No.: 2303A510D9

Bt– 29

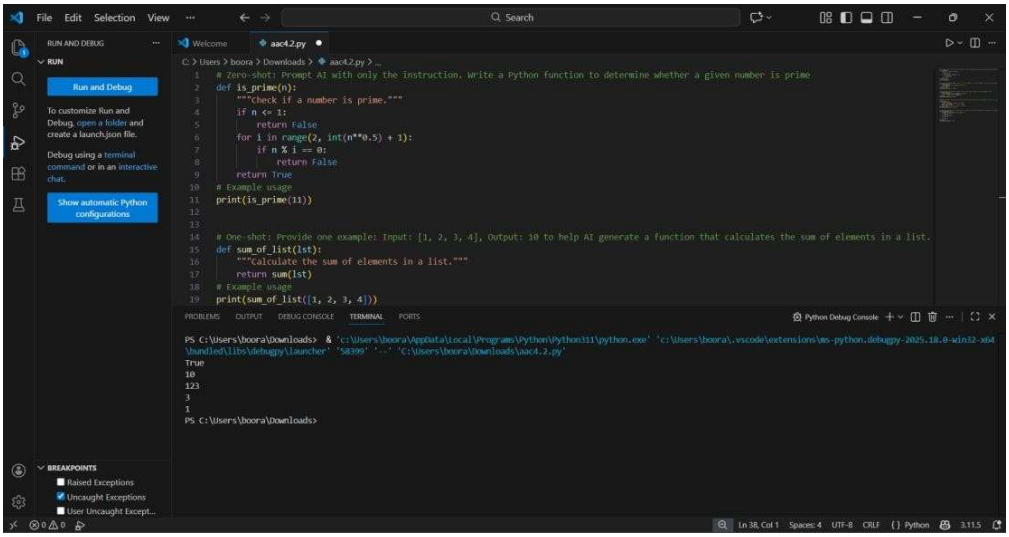
Task Description-1

- Zero-shot: Prompt AI with only the instruction. Write a Python function to determine whether a given number is prime

Expected Output-1

- A basic Python function to check if a number is prime, demonstrating correct logical conditions without relying on examples or additional context

CODE & OUTPUT



OUTPUT - True

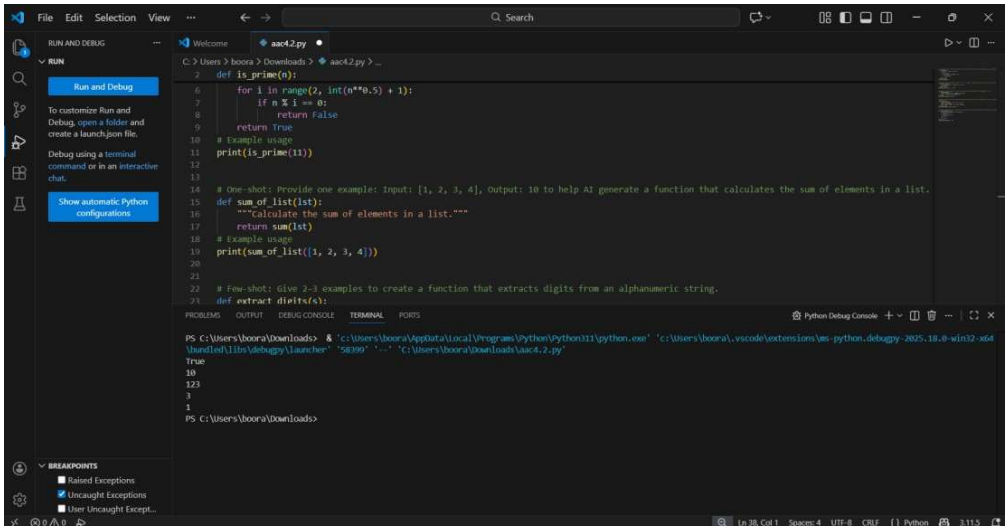
Task Description-2

- One-shot: Provide one example: Input: [1, 2, 3, 4], Output: 10 to help AI generate a function that calculates the sum of elements in a list.

Expected Output-2

• A correct conversion function guided by the single example.

CODE & OUTPUT



OUTPUT - 10

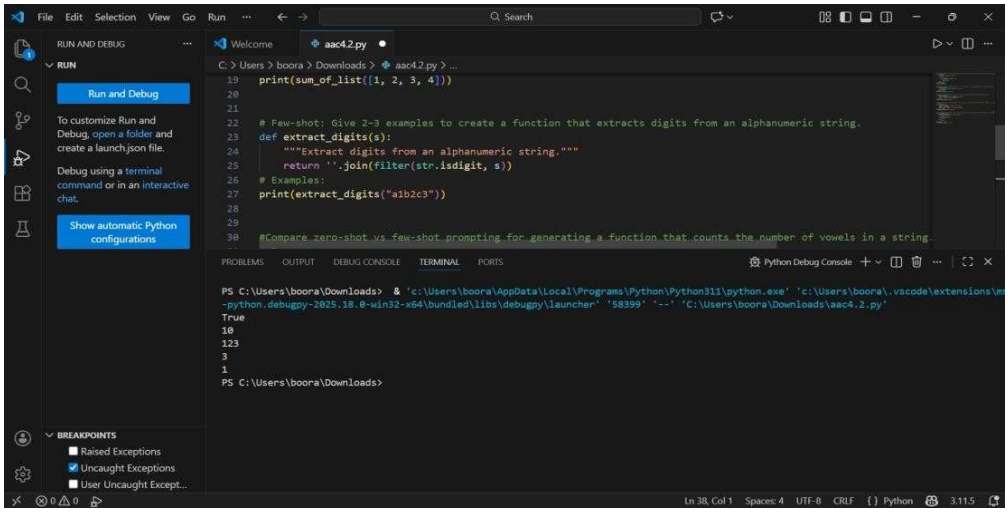
Task Description-3

• Few-shot: Give 2–3 examples to create a function that extracts digits from an alphanumeric string.

Expected Output-3

• Accur ate function that returns only the digits from alphanumeric string.

CODE & OUTPUT



OUTPUT - 123

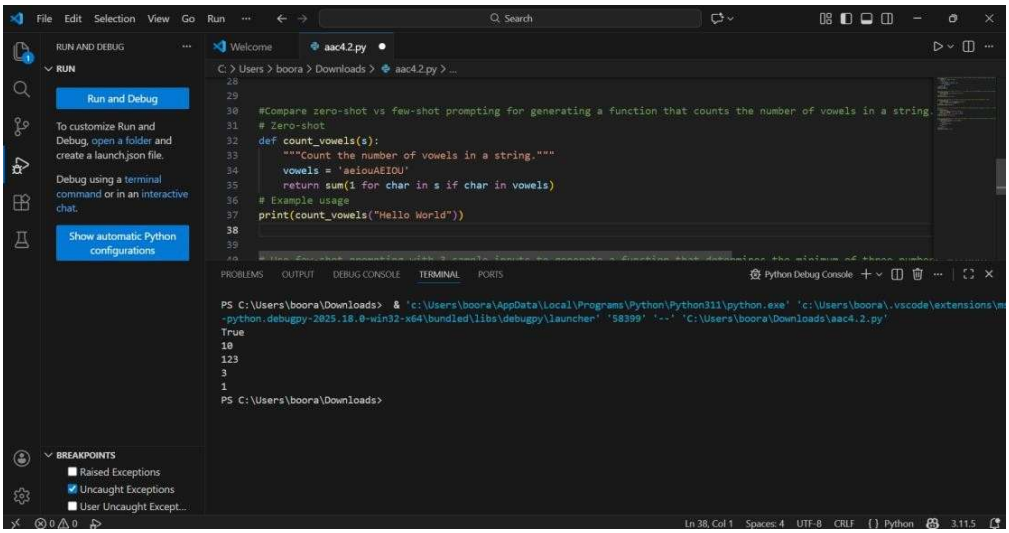
Task Description-4

- Compare zero-shot vs few-shot prompting for generating a function that counts the number of vowels in a string.

Expected Output-4

- Output comparison + student explanation on how examples helped the model.

CODE & OUTPUT



OUTPUT - 3

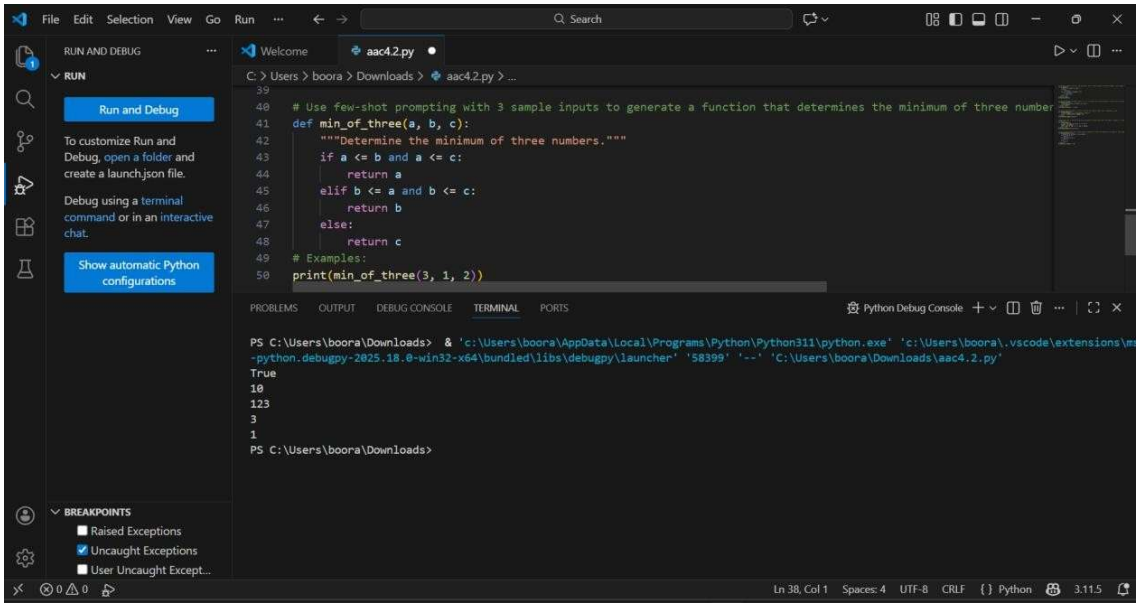
Task Description-5

- Use few-shot prompting with 3 sample inputs to generate a function that determines the minimum of three numbers without using the built-in min() function.

Expected Output-5

- A function that handles all cases with correct logic based on example patterns.

CODE & OUTPUT



OUTPUT - 1