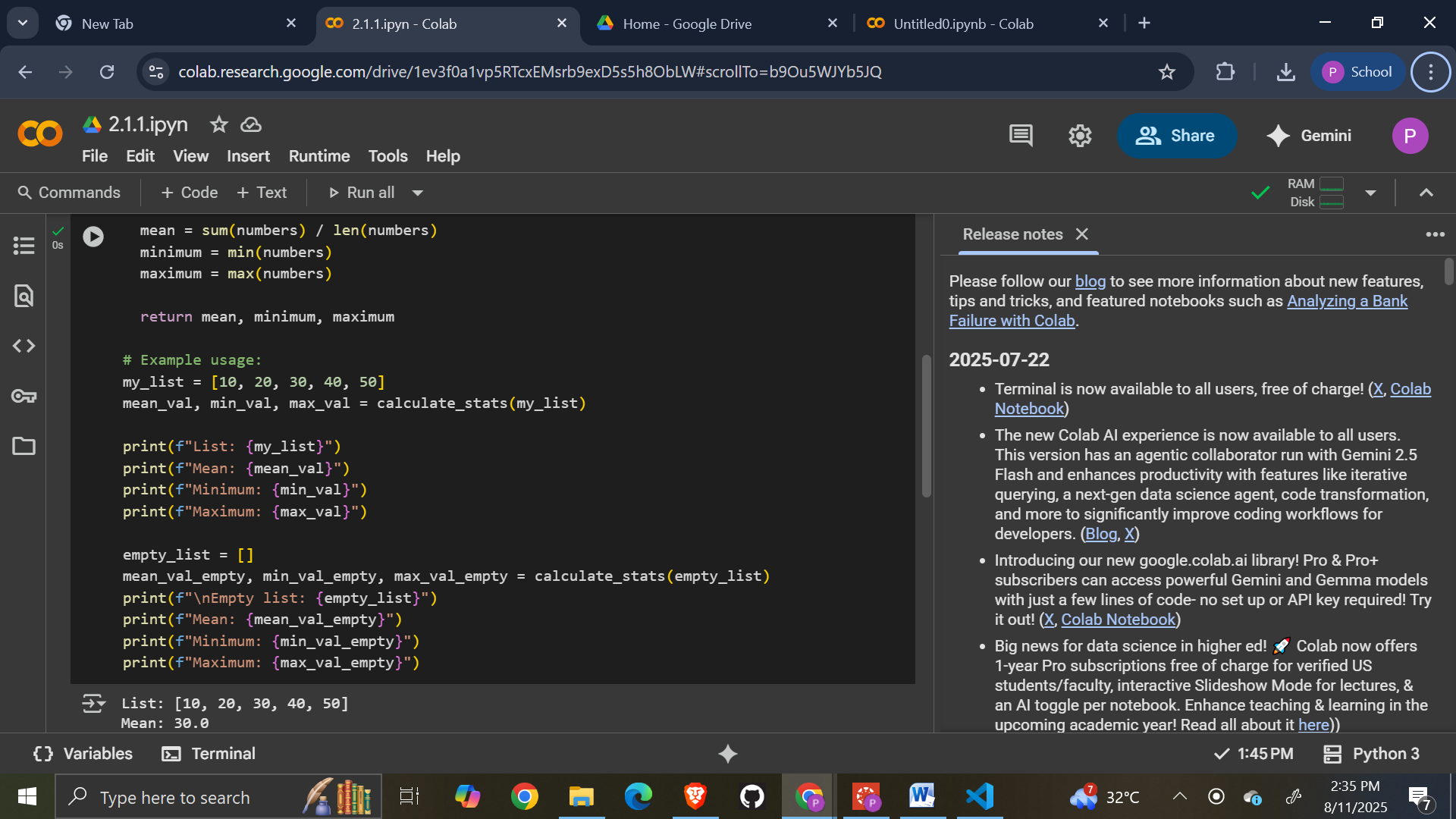
# AI Assisted Coding

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**Batch:** 24BTCAICSB05

**Task Description #1**



A screenshot of a computer

AI-generated content may be incorrect.

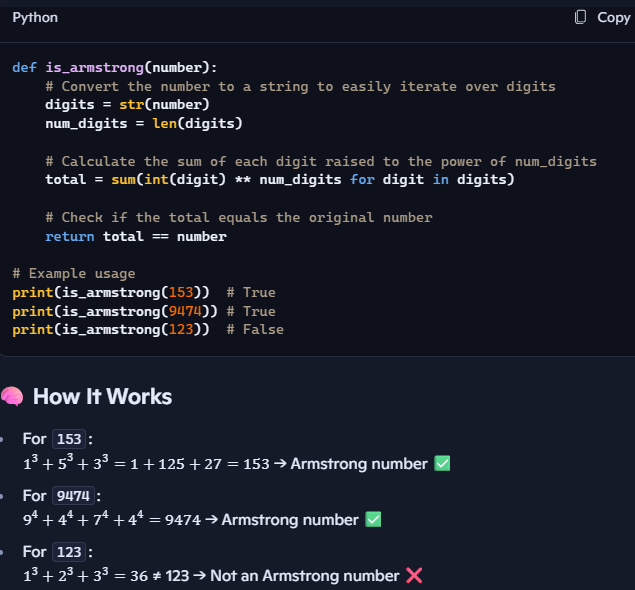
**Task Description #2**

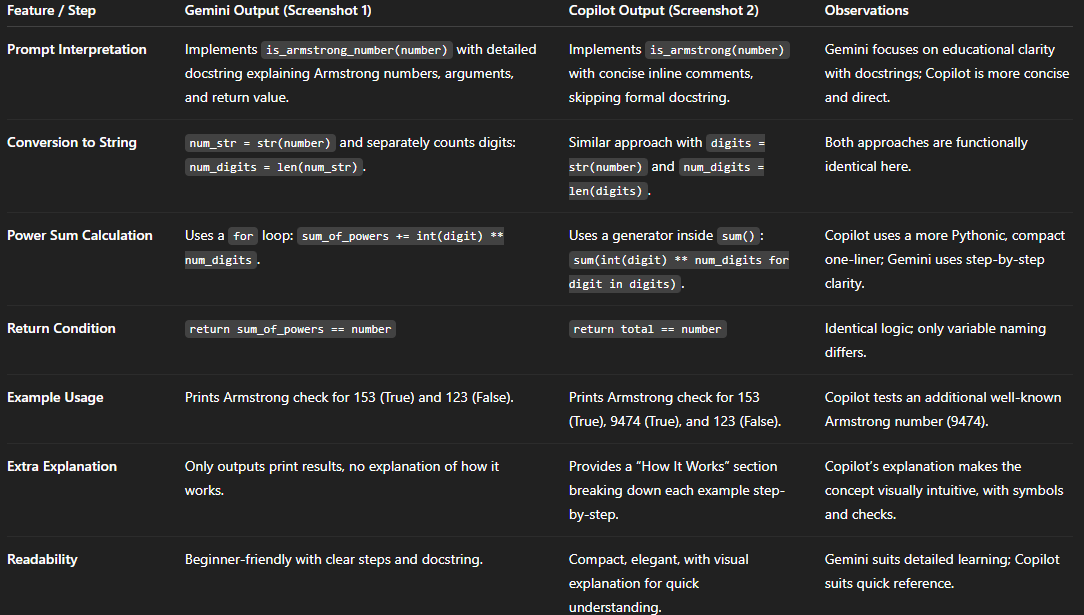
GEMINI:

## 

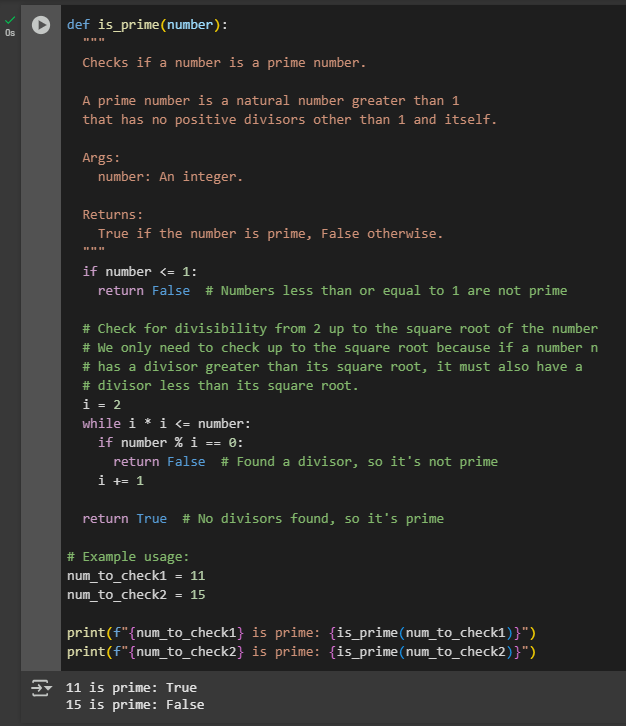
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## CO-PILOT:

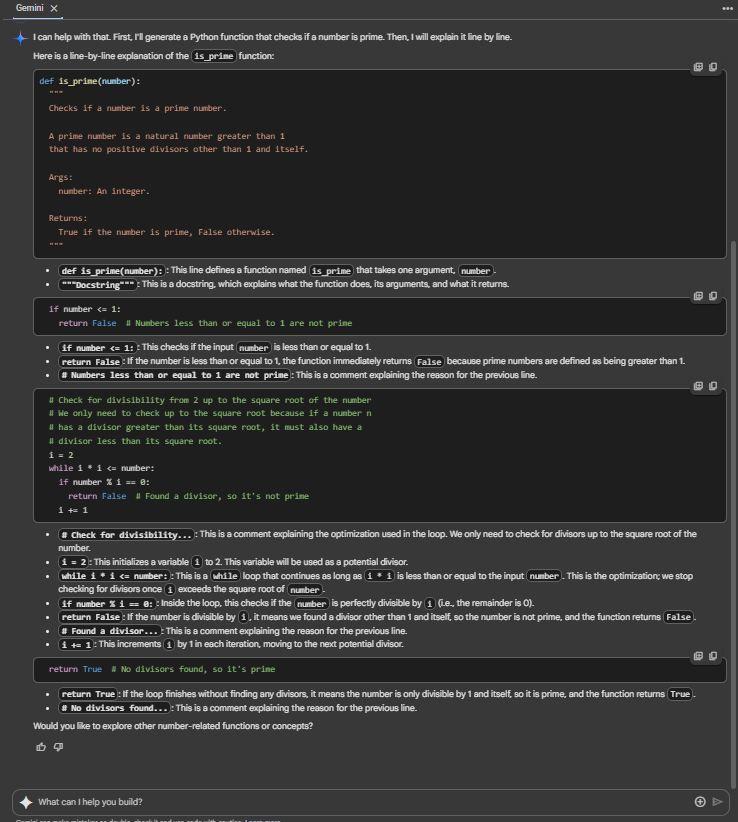
COMPARISION:



**Task Description #3**

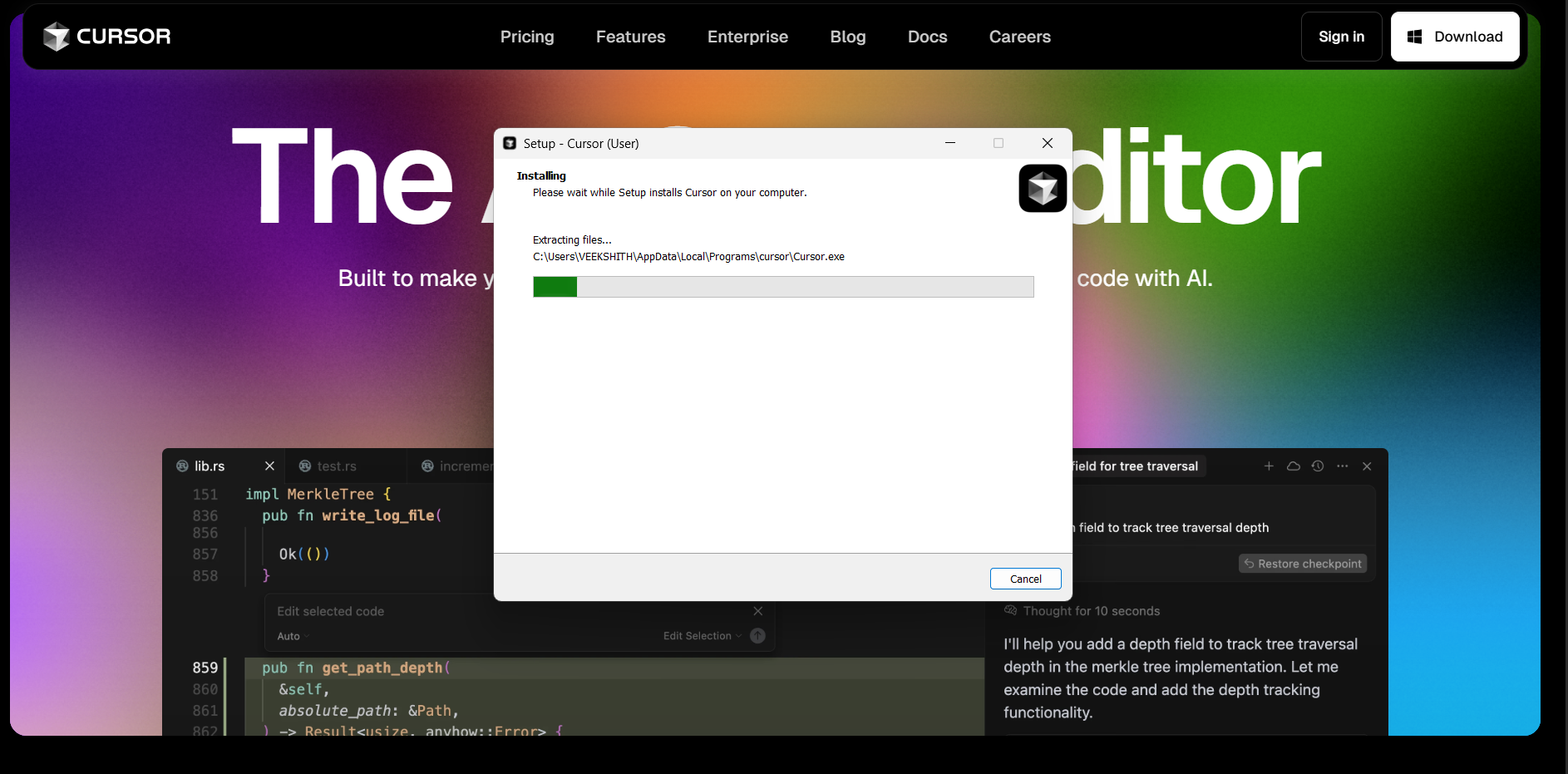


LINE BY LINE EXPLANATION:



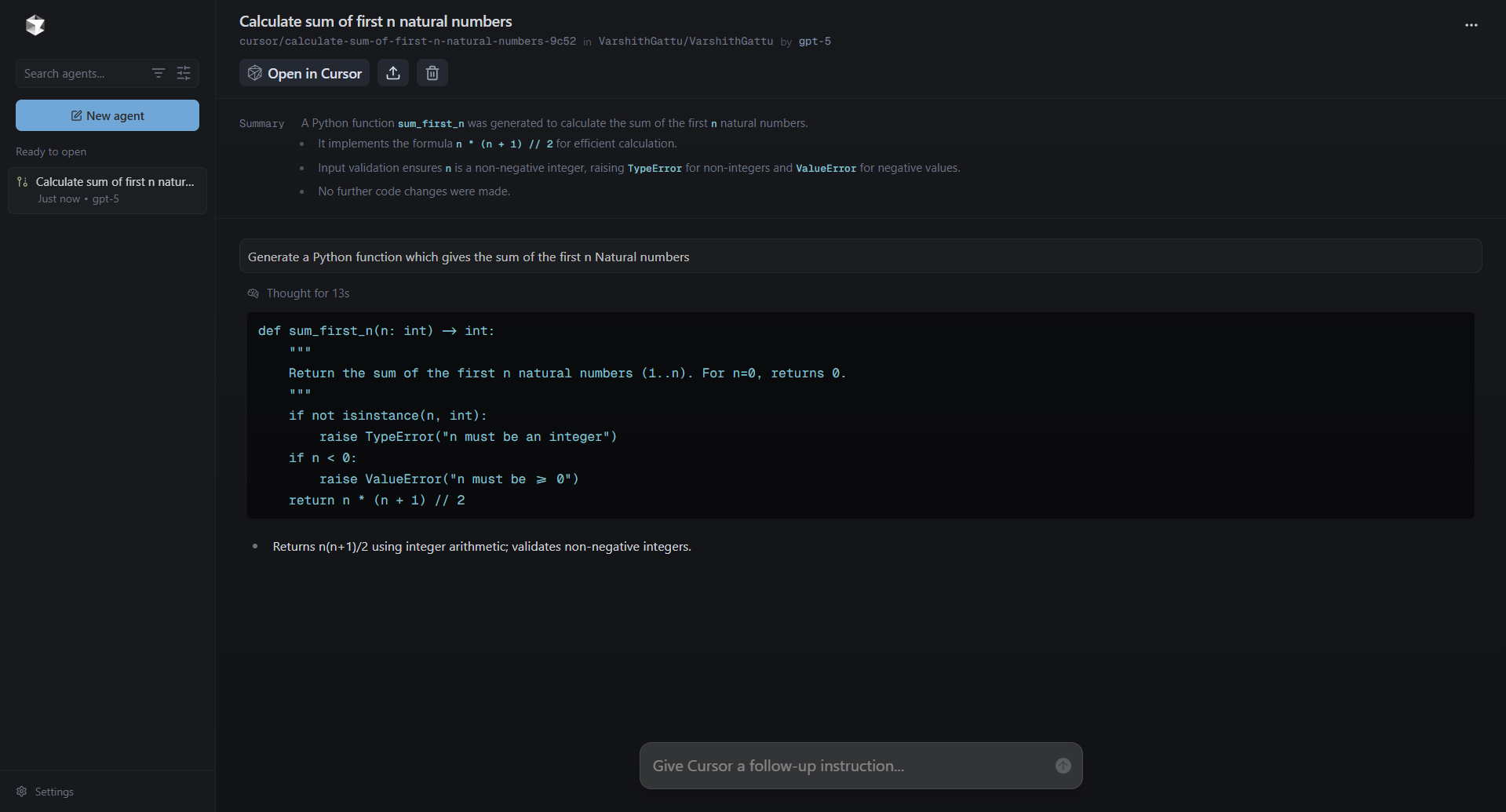
**Task Description #4**

**Cursor AI setup:**



**Prompts used:**

**Generate a Python function which gives the sum of the first n Natural numbers.**



**Task Description #5**

**Original basic code:**

numbers = (1, 2, 3, 4, 5, 6, 7, 8, 9, 10)

even\_sum = 0

odd\_sum = 0

for num in numbers:

if num % 2 == 0:

even\_sum += num

else:

odd\_sum += num

print("Sum of even numbers:", even\_sum)

print("Sum of odd numbers:", odd\_sum)

**Sample Output:**

Sum of even numbers: 30

Sum of odd numbers: 25

**Refactored code:**

def sum\_even\_odd(nums):

even\_sum = sum(n for n in nums if n % 2 == 0)

odd\_sum = sum(n for n in nums if n % 2 != 0)

return even\_sum, odd\_sum

numbers = (1, 2, 3, 4, 5, 6, 7, 8, 9, 10)

even\_total, odd\_total = sum\_even\_odd(numbers)

print(f"Sum of even numbers: {even\_total}")

print(f"Sum of odd numbers: {odd\_total}")

**Sample Output:**

Sum of even numbers: 30

Sum of odd numbers: 25

**Explanation of refactored code:**

**Line 1:** Comment describing what the code does — calculates the sum of odd and even numbers in a tuple.

**Line 3:** Defines a function sum\_even\_odd with one parameter nums, which is expected to be a tuple of integers.

**Line 4:** A **docstring** explaining that the function returns the sum of even and odd numbers from the given tuple.

**Line 5:** Uses the sum() function with a generator expression to add up all numbers n in nums that are divisible by 2 (n % 2 == 0), meaning they are even.

**Line 6:** Similarly, sums up all numbers n in nums that are not divisible by 2 (n % 2 != 0), meaning they are odd.

**Line 7:** Returns both even\_sum and odd\_sum as a tuple.

**Line 10:** Creates a sample tuple numbers containing integers from 1 to 10.

**Line 13:** Calls sum\_even\_odd(numbers) and stores the two returned values in even\_total and odd\_total.

**Line 16:** Prints the sum of even numbers using an f-string for clear formatting.

**Line 17:** Prints the sum of odd numbers using an f-string.

**Output Screenshot:**

