

AI ASSISTED CODING

LAB ASSIGNMENT – 7.3

NAVYA MASADI

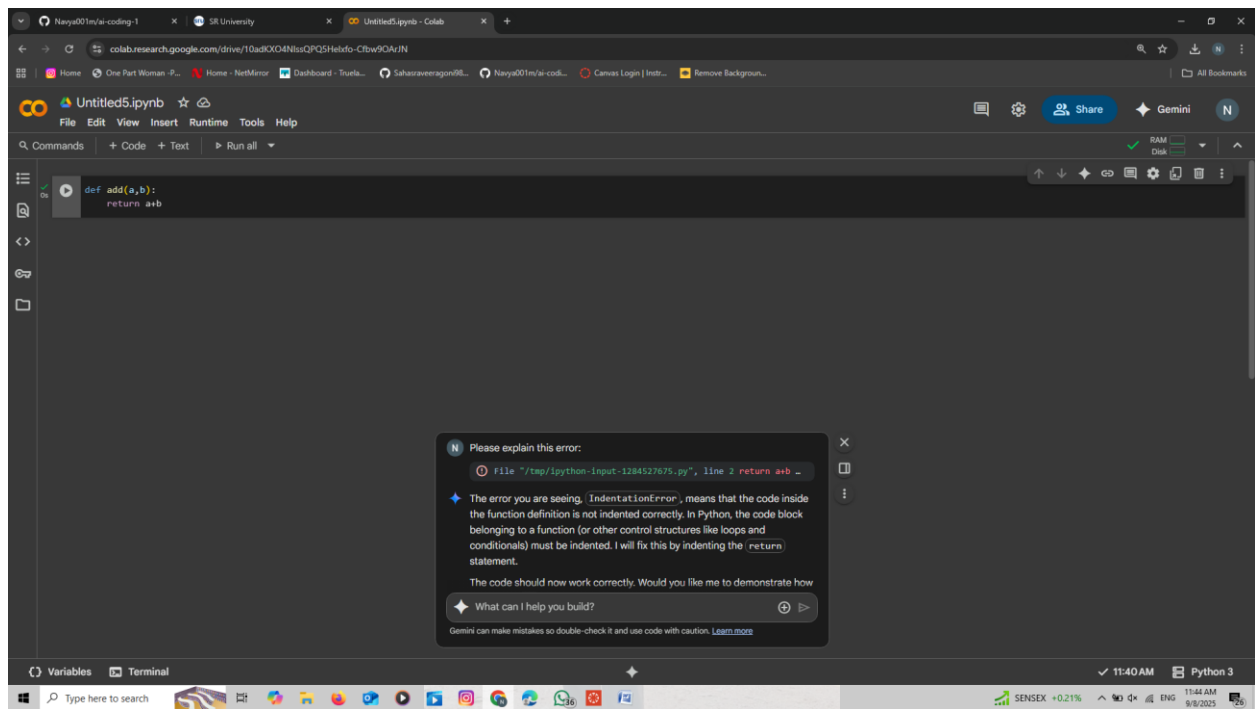
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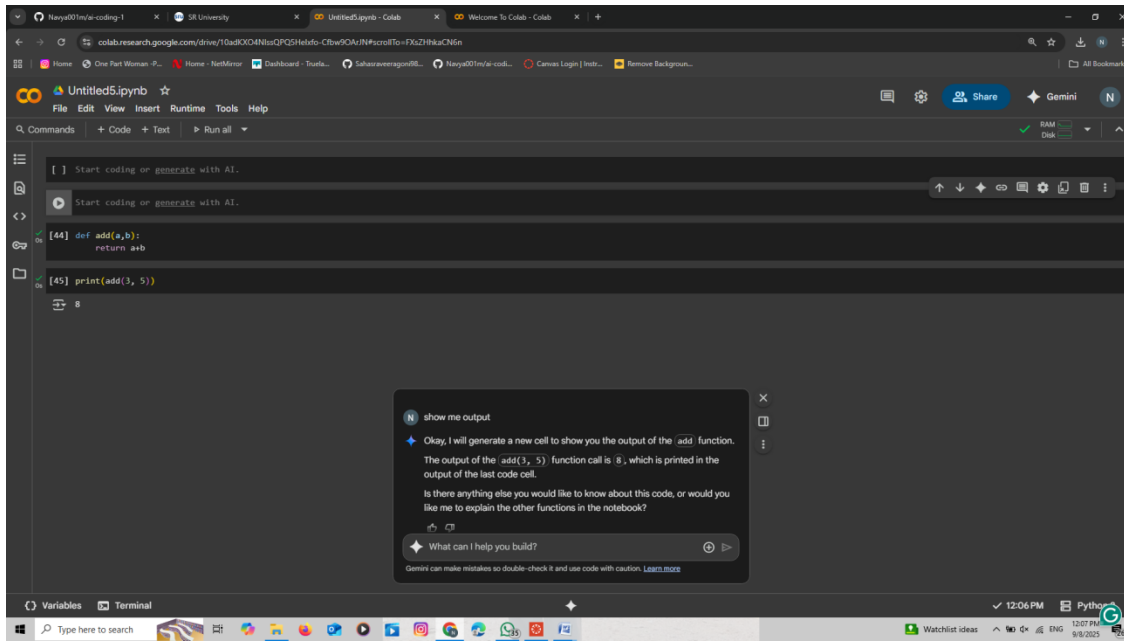
#TASK-1

- Paste a function with a missing colon (add(a, b)), and let AI fix the syntax error.

PROMPT:



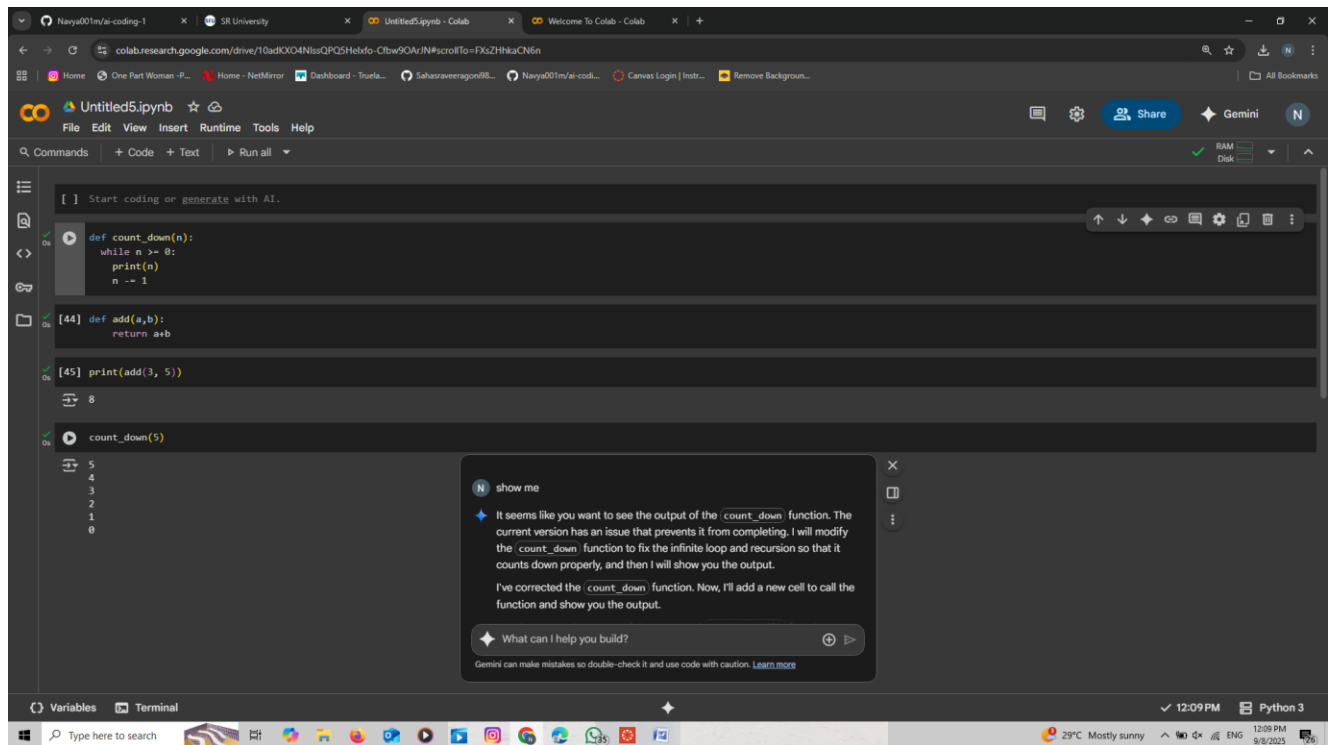
OUTPUT:



#TASK-2

- Identify and fix a logic error in a loop that causes infinite iteration.

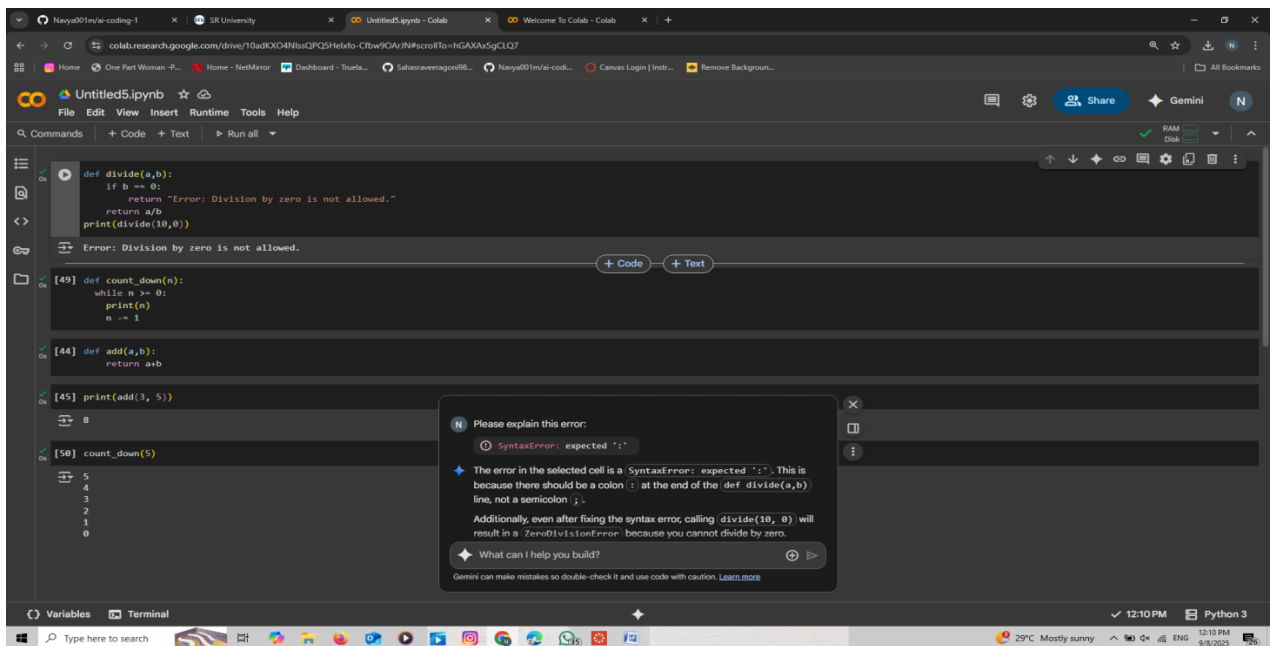
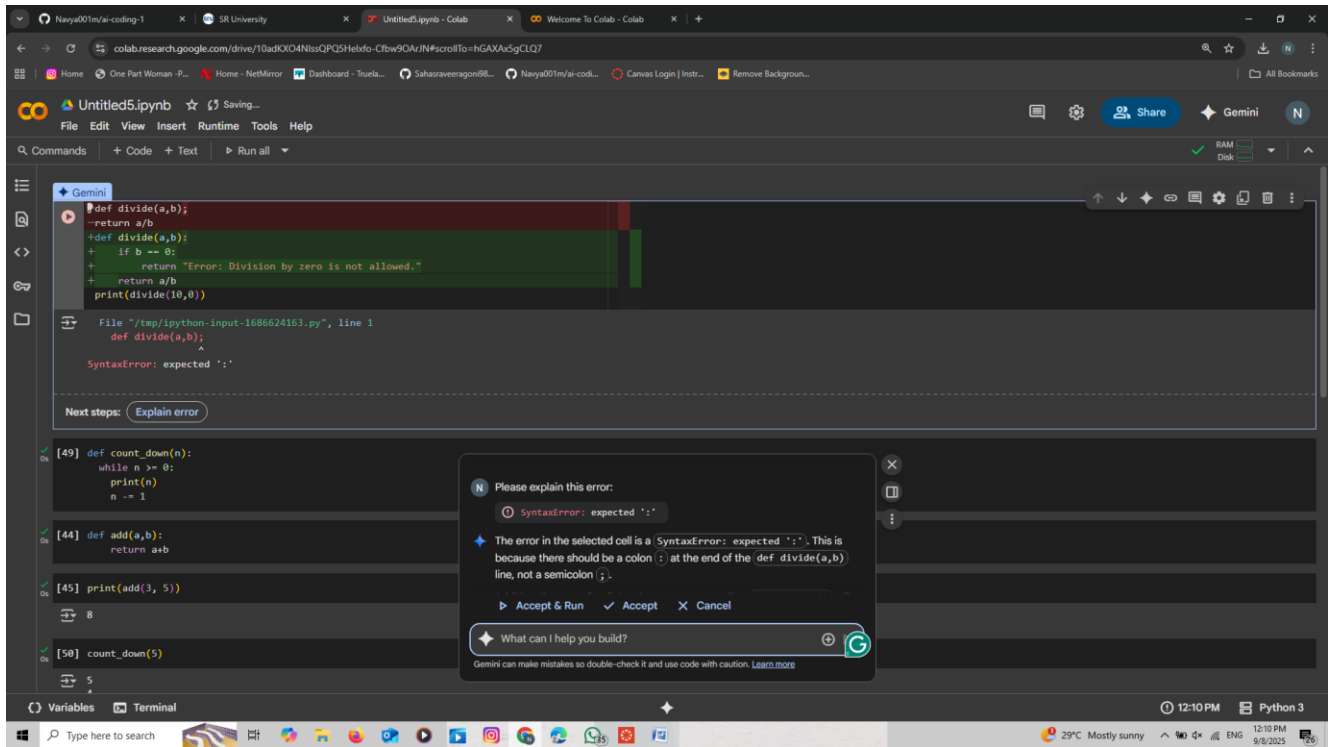
OUTPUT:



#TASK-3

Debug a runtime error caused by division by zero. Let AI insert try-except.

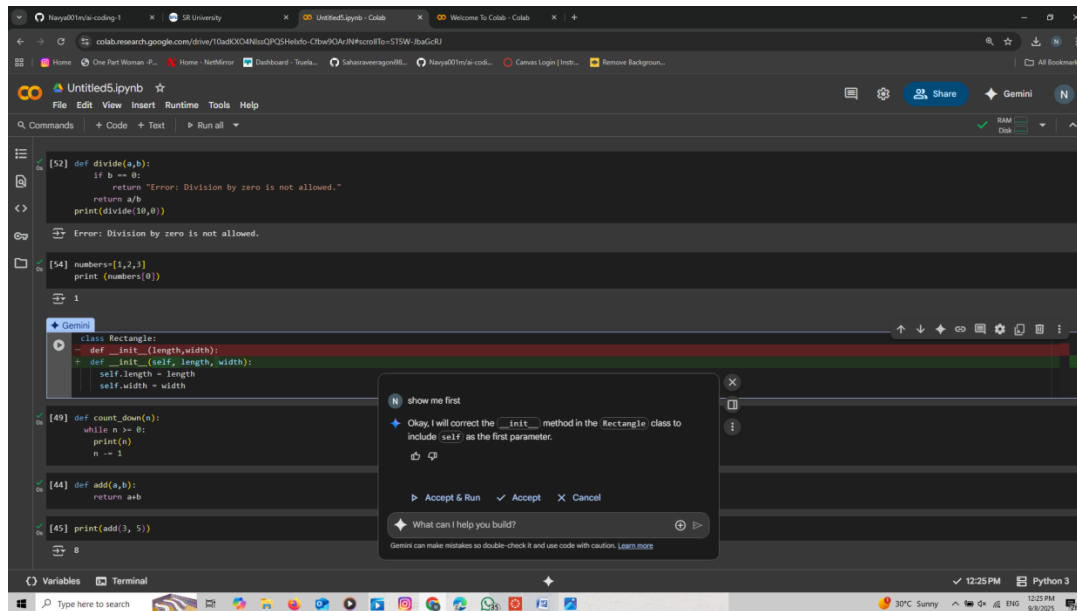
OUTPUT:



#TASK-4

- Provide a faulty class definition (missing self in parameters). Let AI fix it

OUTPUT:



The screenshot shows a Jupyter Notebook environment with the following code cells:

```
[52] def divide(a,b):  
    if b == 0:  
        return "Error: Division by zero is not allowed."  
    return a/b  
print(divide(10,0))
```

Output: Error: Division by zero is not allowed.

```
[54] numbers=[1,2,3]  
print (numbers[0])
```

Output: 1

A Gemini AI assistant popup is displayed, showing the correction for the `Rectangle` class:

```
class Rectangle:  
    def __init__(length,width):  
    def __init__(self,length,width):  
        self.length = length  
        self.width = width
```

The AI message says: "Okay, I will correct the `__init__` method in the `Rectangle` class to include `self` as the first parameter."

Buttons: Accept & Run, Accept, Cancel

Below the AI popup, the code continues:

```
[49] def count_down(n):  
    while n >= 0:  
        print(n)  
        n -- 1
```

```
[44] def add(a,b):  
    return a+b
```

```
[45] print(add(3, 5))
```

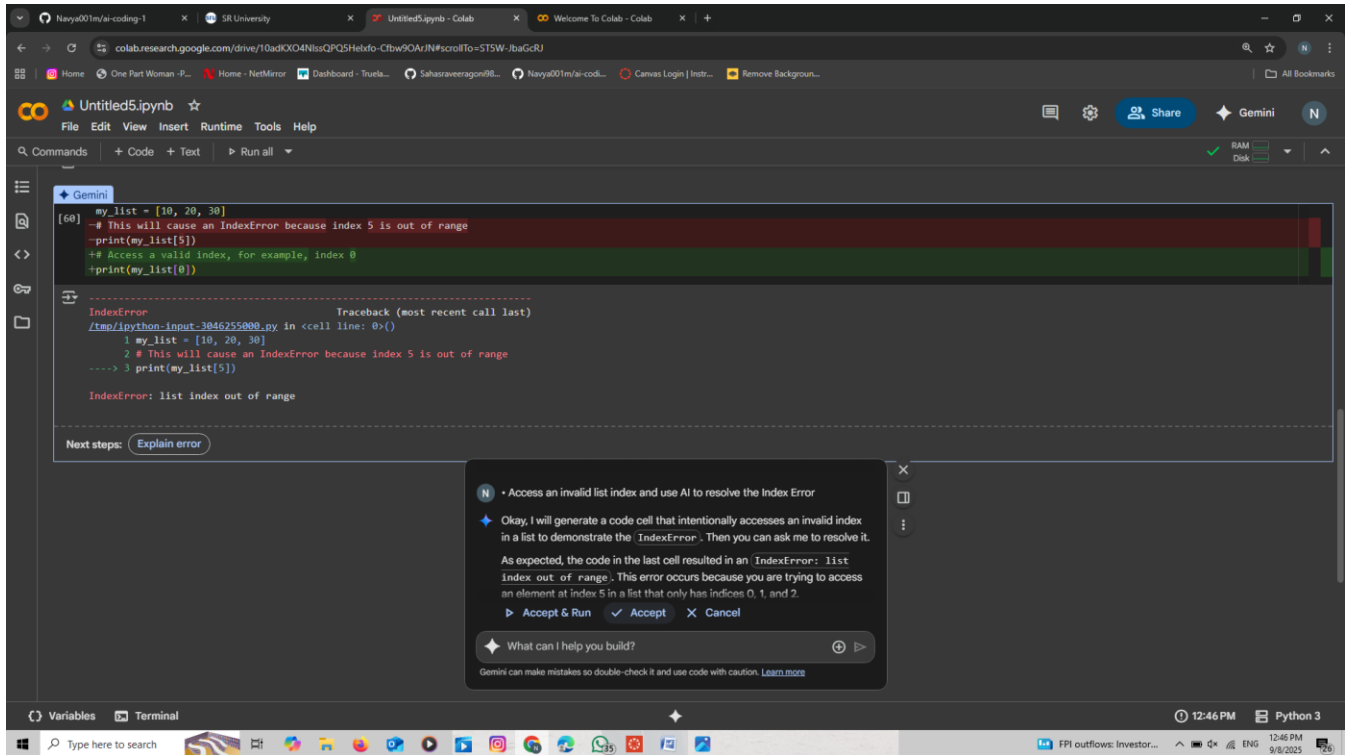
Output: 8

The bottom of the interface shows the system tray with the date 9/8/2025 and time 12:25 PM.

#TASK-5

- Access an invalid list index and use AI to resolve the Index Error.

OUTPUT:



The screenshot shows a Google Colab notebook interface. The top bar includes the Colab logo, file name 'Untitled5.ipynb', and various icons for sharing and settings. The notebook content area displays a code cell with the following Python code:

```
[60] my_list = [10, 20, 30]
      # This will cause an IndexError because index 5 is out of range
      print(my_list[5])
      ## Access a valid index, for example, index 0
      print(my_list[0])
```

Below the code cell, a traceback is shown for an `IndexError`:

```
IndexError                                Traceback (most recent call last)
/tmp/ipython_input-3846255008.py in <cell line: 0>()
      1 my_list = [10, 20, 30]
      2 # This will cause an IndexError because index 5 is out of range
----> 3 print(my_list[5])

IndexError: list index out of range
```

Below the traceback, a 'Next steps:' section contains a button labeled 'Explain error'.

A Gemini AI chat window is open in the bottom right corner. It contains the following text:

N • Access an invalid list index and use AI to resolve the Index Error

✦ Okay, I will generate a code cell that intentionally accesses an invalid index in a list to demonstrate the `IndexError`. Then you can ask me to resolve it.

As expected, the code in the last cell resulted in an `IndexError: list index out of range`. This error occurs because you are trying to access an element at index 5 in a list that only has indices 0, 1, and 2.

► Accept & Run ✓ Accept ✕ Cancel

✦ What can I help you build? ⓘ ▶

Gemini can make mistakes so double-check it and use code with caution. [Learn more](#)

The bottom of the screen shows a Windows taskbar with various application icons and a system tray on the right indicating the time as 12:46 PM on 9/8/2025.

Untitled5.ipynb - Colab

colab.research.google.com/drive/10adKXO4NtsQP25Hetfo-Cfbw90A/iN#scrollTo=5T5W-ItaGcRJ

HomeOne Part Woman (P...Home - NetMirrorDashboard - Truela...Sahasraveragon98...Navya001m/ai-codi...Canvas Login | Instr...Remove Backgroun...

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+

Gemini

[61] my_list = [10, 20, 30]
Access a valid index, for example, index 0
print(my_list[0])

10

• Access an invalid list index and use AI to resolve the Index Error

✦ Okay, I will generate a code cell that intentionally accesses an invalid index in a list to demonstrate the `IndexError`. Then you can ask me to resolve it.
As expected, the code in the last cell resulted in an `IndexError: list index out of range`. This error occurs because you are trying to access an element at index 5 in a list that only has indices 0, 1, and 2.
To resolve this, you need to access a valid index within the range of the list. I

✦ What can I help you build?

Gemini can make mistakes so double-check it and use code with caution. [Learn more](#)

VariablesTerminal

Type here to search

FPI outflows: Investor...

12:47 PM Python 3 9/8/2023