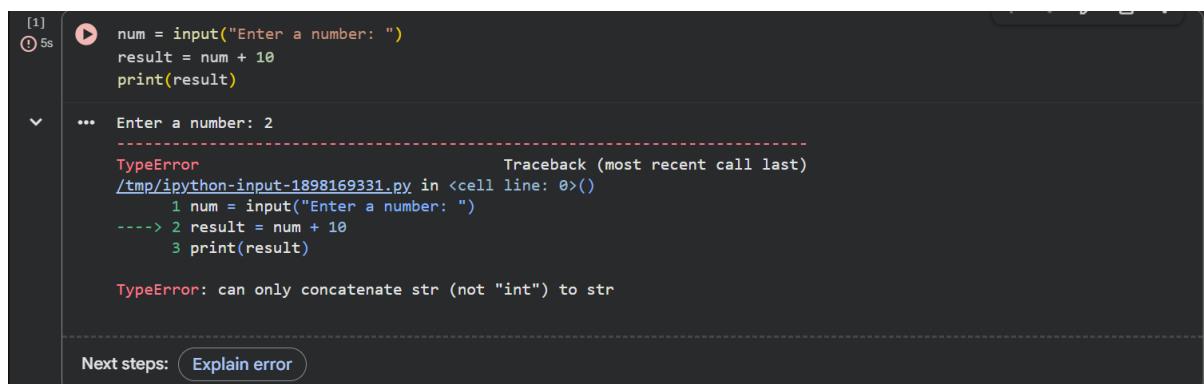


School of Computer Science and Artificial Intelligence**Lab Assignment # 7.2**

Program	: B. Tech (CSE)
Specialization	: -
Course Title	: AI Assisted Coding
Course Code	: 23CS002PC304
Semester	: II
Academic Session	: 2025-2026
Name of Student	: G Mani prasad
Enrollment No.	: 2403A51L48
Batch No.	: 52
Date	: 30/01/26

Submission Starts here**Screenshots:****Task 1 – Runtime Error Due to Invalid Input Type****(Buggy Code):**

```
num = input("Enter a number: ")
result = num + 10
print(result)
```



The screenshot shows a Jupyter Notebook cell with the following code:

```
[1] ① 5s ▶ num = input("Enter a number: ")
      result = num + 10
      print(result)

... Enter a number: 2
-----
```

A **TypeError** is displayed, indicating that it's not possible to concatenate a string and an integer:

```
Traceback (most recent call last)
/tmp/ipython-input-1898169331.py in <cell line: 0>()
      1 num = input("Enter a number: ")
      2 result = num + 10
      3 print(result)

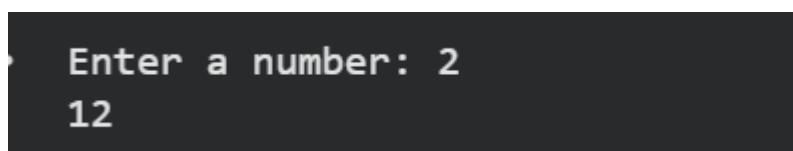
TypeError: can only concatenate str (not "int") to str
```

At the bottom of the cell, there is a button labeled **Explain error**.

Output:

The screenshot shows a Jupyter Notebook cell with the following corrected code:

```
▶ -num = input("Enter a number: ")
+num = int(input("Enter a number: "))
      result = num + 10
      print(result)
```



The screenshot shows a terminal window with the following output:

```
• Enter a number: 2
12
```

Task 2 – Incorrect Function Return Value

(Buggy Code):

```
def square(n):
    result = n * n
```

The screenshot shows a code editor window with a dark theme. At the top, there is a status bar with the text "Gemini". Below it, a code editor pane displays the following Python code:

```
def square(n):
    result = n * n
```

An error message is displayed below the code:

```
...     File "/tmp/ipython-input-3910404483.py", line 2
        result = n * n
              ^
IndentationError: expected an indented block after function definition on line 1
```

At the bottom of the editor, there is a "Next steps:" button with the text "Explain error".

Output:

The screenshot shows a code editor window with a dark theme. At the top, there is a status bar with the text "Gemini". Below it, a code editor pane displays the following Python code:

```
def square(n):
    -result = n * n
    +    result = n * n
```

The code has been corrected by adding an indentation level to the assignment statement. The original code is shown in red, and the corrected code is shown in green.

Task 3 – IndexError in List Traversal

(Buggy Code):

```
numbers = [10, 20, 30]
for i in range(0, len(numbers)+1):
    print(numbers[i])
```

The screenshot shows a code editor window with a dark theme. At the top, there is a status bar with the text "Gemini". Below it, a code editor pane displays the following Python code:

```
[11] ① 0s
def square(n):
    result = n * n
```

An error message is displayed below the code:

```
...     File "/tmp/ipython-input-726334973.py", line 3
        print(numbers[i])
              ^
IndentationError: expected an indented block after 'for' statement on line 2
```

At the bottom of the editor, there is a "Next steps:" button with the text "Explain error".

Output:

The screenshot shows a code editor window with a dark theme. At the top, there is a status bar with the text "Gemini". Below it, a code editor pane displays the following Python code:

```
[1] ① 0s
def square(n):
    result = n * n
```

The code has been corrected by changing the range loop to start at 0 and end at len(numbers). The original code is shown in red, and the corrected code is shown in green.

```
... 10
20
30
```

Task 4 – Uninitialized Variable Usage

(Buggy Code):

```
if True:
pass
print(total)
```

```
[13] 0s
▶ if True:
    pass
    print(total)

...   File "/tmp/ipython-input-1170978020.py", line 2
        pass
        ^
IndentationError: expected an indented block after 'if' statement on line 1

Next steps: Explain error
```

Output:

```
[13] Gemini
▶ if True:
- pass
+ pass
- print(total)
-
```

```
[13] Gemini
▶ if True:
    pass
+total = 0 # Or any other initial value
    print(total)
```

```
... 0
```

Task 5 – Logical Error in Student Grading System

(Buggy Code):

```
marks = 85
if marks >= 90:
grade = "A"
```

elif marks >= 80:

grade = "C"

else:

grade = "B"

print(grade)

[16] ⓘ 0s

```
marks = 85
if marks >= 90:
    grade = "A"
elif marks >= 80:
    grade = "C"
else:
    grade = "B"
print(grade)

... File "/tmp/ipython-input-2691675298.py", line 3
      grade = "A"
      ^
IndentationError: expected an indented block after 'if' statement on line 2
```

Next steps: Explain error

Output:

◆ Gemini

```
marks = 85
if marks >= 90:
- grade = "A"
+     grade = "A"
elif marks >= 80:
- grade = "C"
+     grade = "C"
else:
- grade = "B"
+     grade = "B"
print(grade)
```

```
... C
```