ASSIGNMENT-7.1

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Batch:40

Task Description #1 (Syntax Errors – Missing Parentheses in Print

Statement)

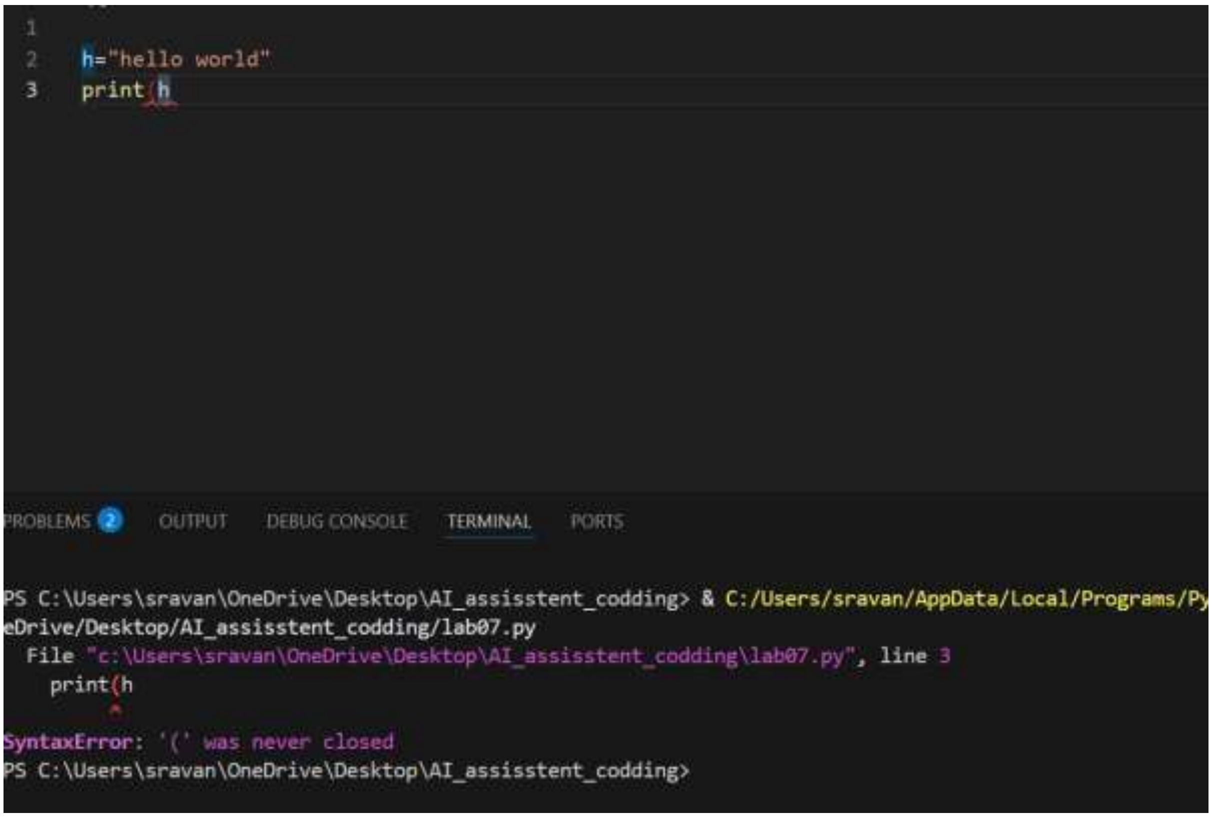
Task: Provide a Python snippet with a missing parenthesis in a print

statement (e.g., print "Hello"). Use AI to detect and fix the syntax error.

# Bug: Missing parentheses in print statement def

greet():

print "Hello, AI Debugging Lab!" greet()



```
h="hello world"
print(h
```

PROBLEMS 2   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
PS C:\Users\sravan\OneDrive\Desktop\AI_assisstent_codding> & C:/Users/sravan/AppData/Local/Programs/Py
eDrive/Desktop/AI_assisstent_codding/lab07.py
  File "c:\Users\sravan\OneDrive\Desktop\AI_assisstent_codding\lab07.py", line 3
    print(h
         ^
SyntaxError: '(' was never closed
PS C:\Users\sravan\OneDrive\Desktop\AI_assisstent_codding>
```

Task Description #2 (Incorrect condition in an If Statement)

Task: Supply a function where an if-condition mistakenly uses =

instead of ==. Let AI identify and fix the issue. # Bug: Using

assignment (=) instead of comparison (==) def

check_number(n):

if n = 10: return

"Ten" else:

return "Not Ten"

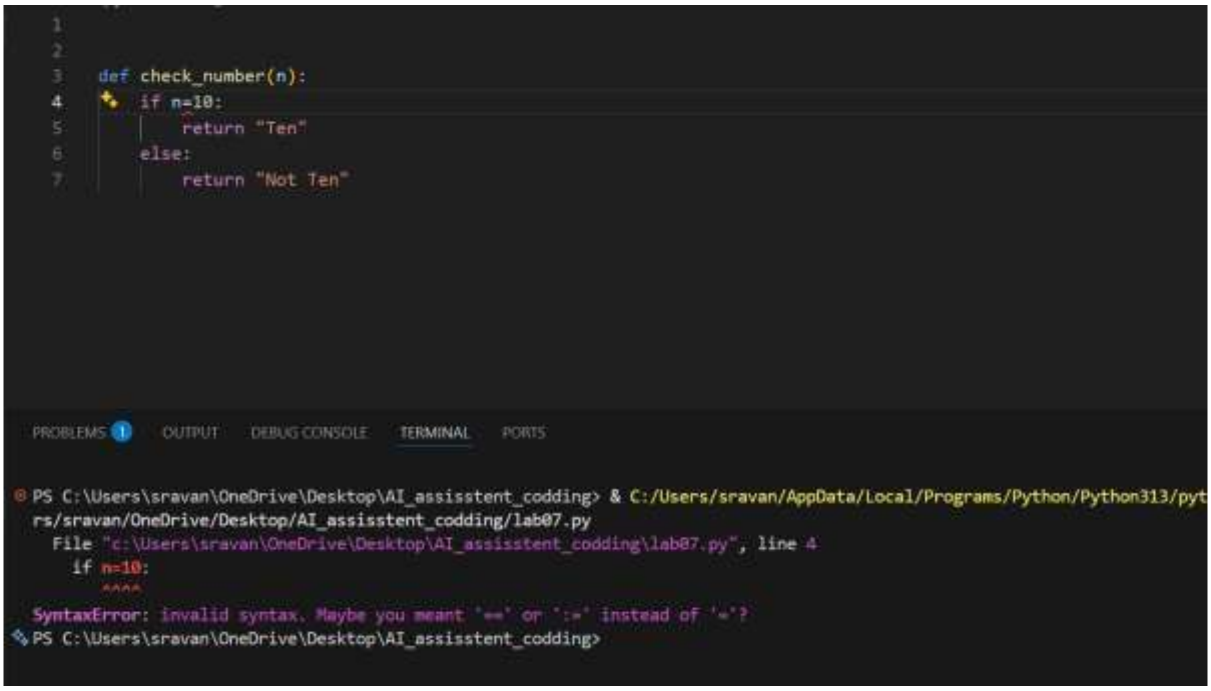
Requirements:

• Ask AI to explain why this causes a bug.

• Correct the code and verify with 3 assert test cases.

Expected Output #2:

• Corrected code using == with explanation and successful test execution.



```
def check_number(n):
    if n=10:
        return "Ten"
    else:
        return "Not Ten"
```

```
PS C:\Users\sravan\OneDrive\Desktop\AI_assisstent_codding> & C:/Users/sravan/AppData/Local/Programs/Python/Python313/pyt
rs/sravan/OneDrive/Desktop/AI_assisstent_codding/lab07.py
  File "c:\Users\sravan\OneDrive\Desktop\AI_assisstent_codding\lab07.py", line 4
    if n=10:
       ^^^^
SyntaxError: invalid syntax. Maybe you meant '==' or ':=' instead of '='?
PS C:\Users\sravan\OneDrive\Desktop\AI_assisstent_codding>
```

Task Description #3 (Runtime Error – File Not Found)

Task: Provide code that attempts to open a non-existent file and

crashes. Use AI to apply safe error handling. # Bug: Program crashes if file is missing def read_file(filename): with

open(filename, 'r') as f:

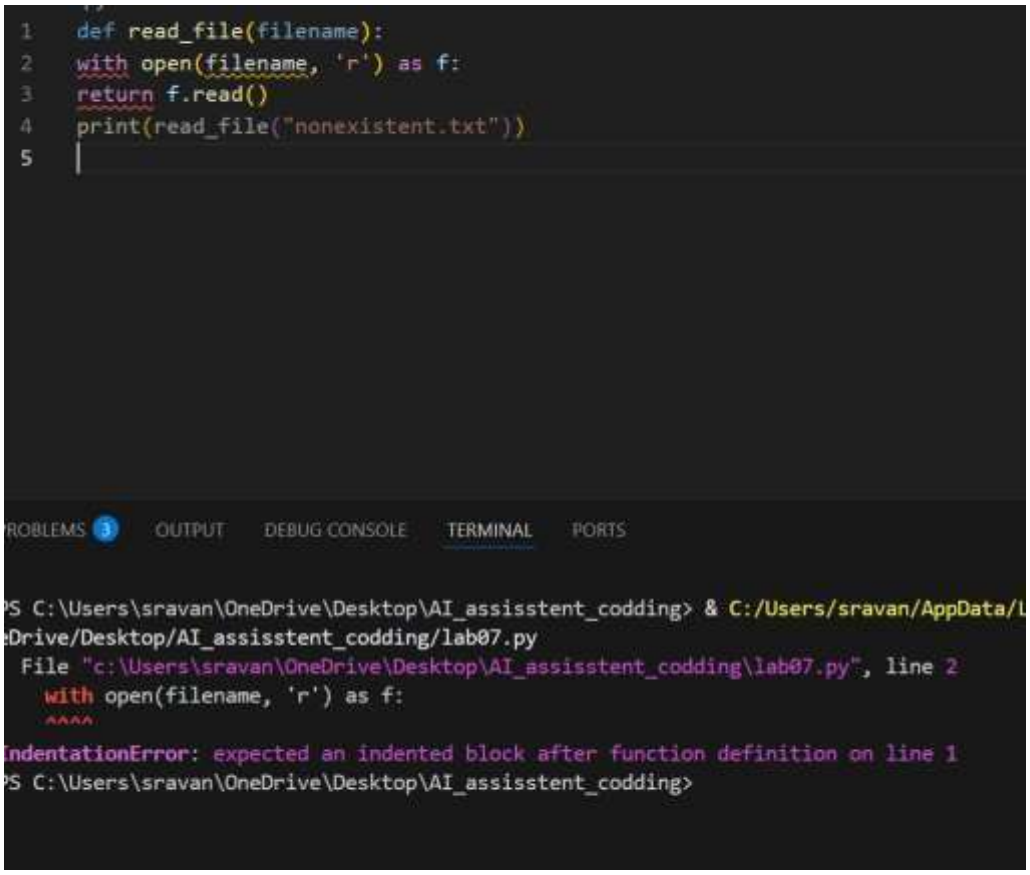
return f.read() print(read_file("nonexistent.txt"))

Requirements:

• Implement a try-except block suggested by AI.

• Add a user-friendly error message.

• Test with at least 3 scenarios: file exists, file missing, invalid path.



```python
def read_file(filename):
with open(filename, 'r') as f:
return f.read()
print(read_file("nonexistent.txt"))
```

```
S C:\Users\sravan\OneDrive\Desktop\AI_assisstent_codding> & C:/Users/sravan/AppData/L
Drive/Desktop/AI_assisstent_codding/lab07.py
  File "c:\Users\sravan\OneDrive\Desktop\AI_assisstent_codding\lab07.py", line 2
    with open(filename, 'r') as f:
    ^^^^
IndentationError: expected an indented block after function definition on line 1
S C:\Users\sravan\OneDrive\Desktop\AI_assisstent_codding>
```

Task Description #4 (Calling a Non-Existent Method) Task:

Give a class where a non-existent method is called (e.g., obj.undefined_method()). Use AI to debug and fix.

# Bug: Calling an undefined method class

Car: def start(self): return "Car started" my_car = Car() print(my_car.drive()) #

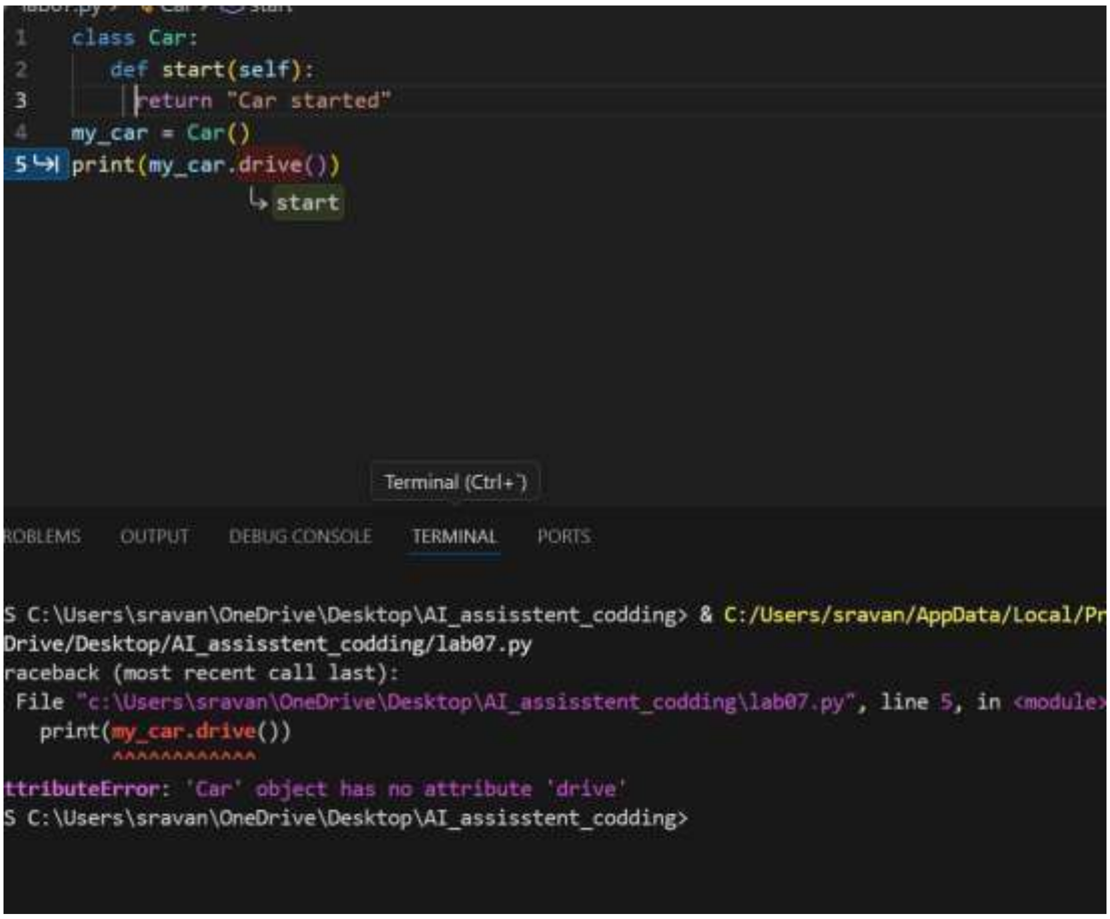
drive() is not defined

Requirements:

- Students must analyze whether to define the missing method

  or correct the method call.

- Use 3 assert tests to confirm the corrected class works.



```python
class Car:
    def start(self):
        return "Car started"
my_car = Car()
print(my_car.drive())
                ↳ start
```

```
S C:\Users\sravan\OneDrive\Desktop\AI_assisstent_codding> & C:/Users/sravan/AppData/Local/Pr
Drive/Desktop/AI_assisstent_codding/lab07.py
raceback (most recent call last):
 File "c:\Users\sravan\OneDrive\Desktop\AI_assisstent_codding\lab07.py", line 5, in <module>
   print(my_car.drive())
         ^^^^^^^^^^^^
ttributeError: 'Car' object has no attribute 'drive'
S C:\Users\sravan\OneDrive\Desktop\AI_assisstent_codding>
```

Task Description #5 (TypeError – Mixing Strings and Integers in

Addition)

Task: Provide code that adds an integer and string ("5" + 2) causing a

TypeError. Use AI to resolve the bug.

# Bug: TypeError due to mixing string and integer

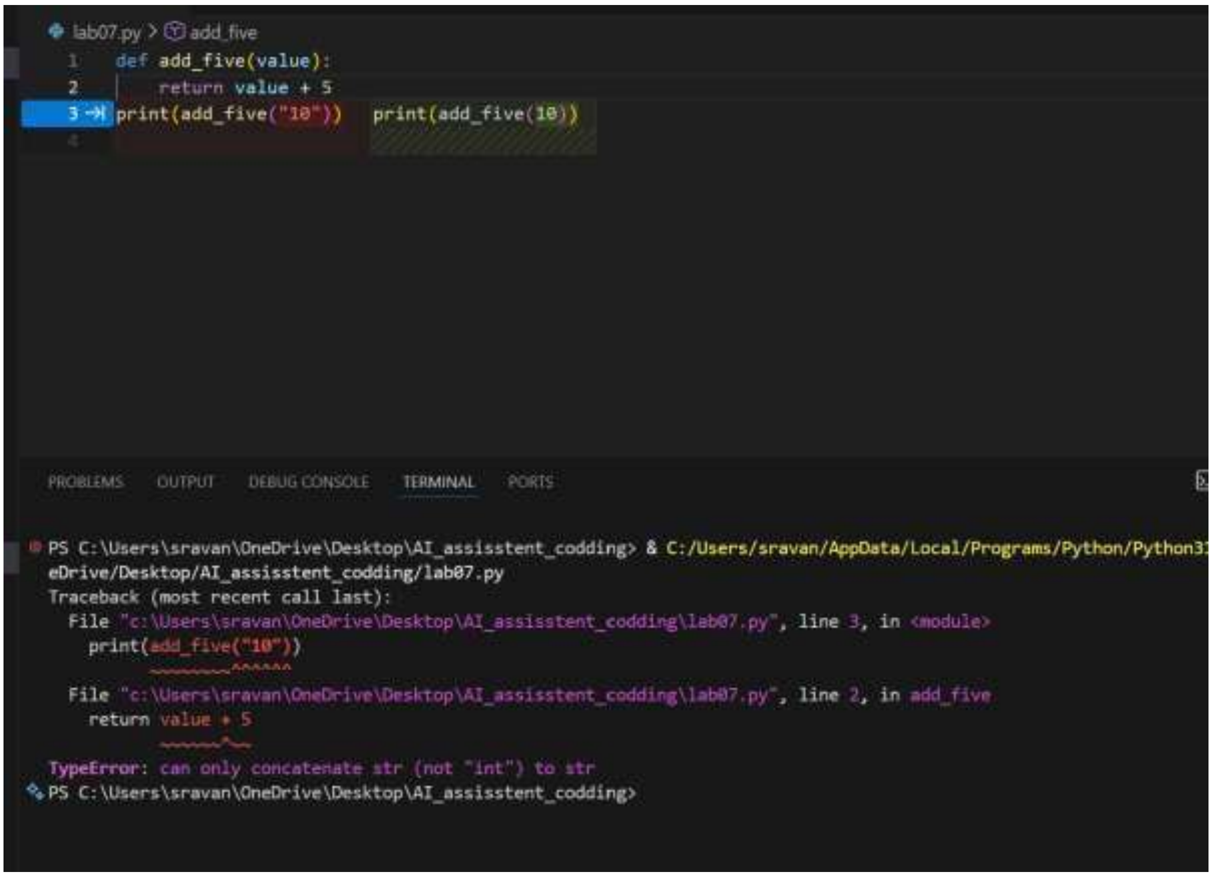
def add_five(value): return value + 5

print(add_five("10"))

Requirements:

• Ask AI for two solutions: type casting and string concatenation.

• Validate with 3 assert test cases.



```python
def add_five(value):
    return value + 5
print(add_five("10"))   print(add_five(10))
```

```
PS C:\Users\sravan\OneDrive\Desktop\AI_assisstent_codding> & C:/Users/sravan/AppData/Local/Programs/Python/Python3
eDrive/Desktop/AI_assisstent_codding/lab07.py
Traceback (most recent call last):
  File "c:\Users\sravan\OneDrive\Desktop\AI_assisstent_codding\lab07.py", line 3, in <module>
    print(add_five("10"))
          ~~~~~~~~^^^^^^
  File "c:\Users\sravan\OneDrive\Desktop\AI_assisstent_codding\lab07.py", line 2, in add_five
    return value + 5
           ~~~~~~^~~
TypeError: can only concatenate str (not "int") to str
PS C:\Users\sravan\OneDrive\Desktop\AI_assisstent_codding>
```