

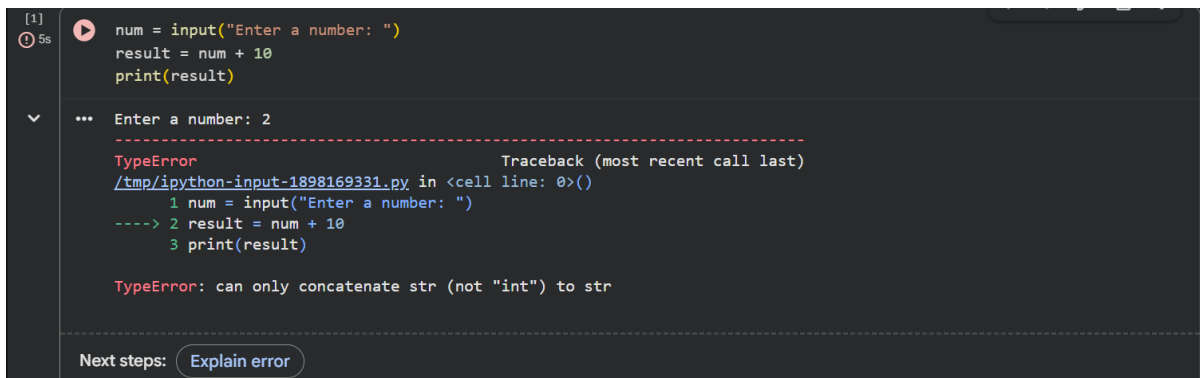
School of Computer Science and Artificial Intelligence

Lab Assignment # 7.2

Program	: B. Tech (CSE)
Specialization	: -
Course Title	: AI Assisted Coding
Course Code	: 23CS002PC304
Semester	: II
Academic Session	: 2025-2026
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Enrollment No.	: 2403A51L49
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)
```

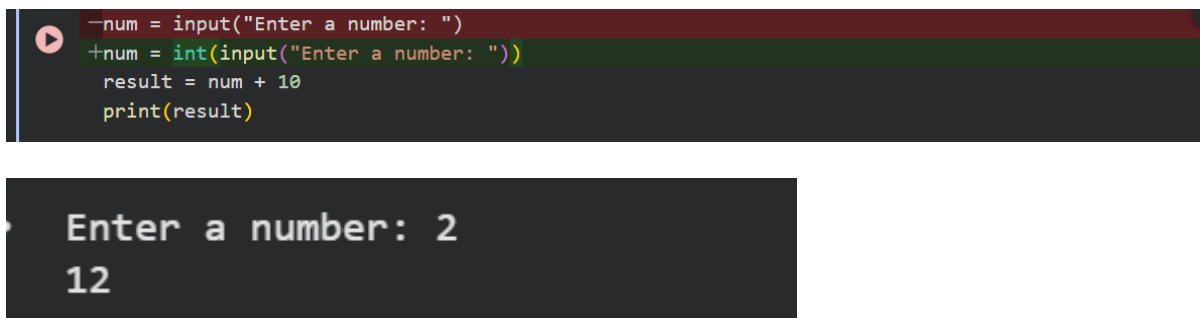


```
[1] 5s num = input("Enter a number: ")
      result = num + 10
      print(result)

*** Enter a number: 2
-----
TypeError                                 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

Next steps: Explain error
```

Output:

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

Enter a number: 2
12
```

Task 2 – Incorrect Function Return Value

(Buggy Code):

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

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

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

Next steps: [Explain error](#)

Output:

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

```
[10] ✓ 0s def square(n):
        result = n * n
```

Task 3 – IndexError in List Traversal

(Buggy Code):

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

```
[11] 0s numbers = [10, 20, 30]
for i in range(0, len(numbers)+1):
    print(numbers[i])

... File "/tmp/ipython-input-726334973.py", line 3
    print(numbers[i])
    ^
IndexError: list index out of range
```

Next steps: [Explain error](#)

Output:

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

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

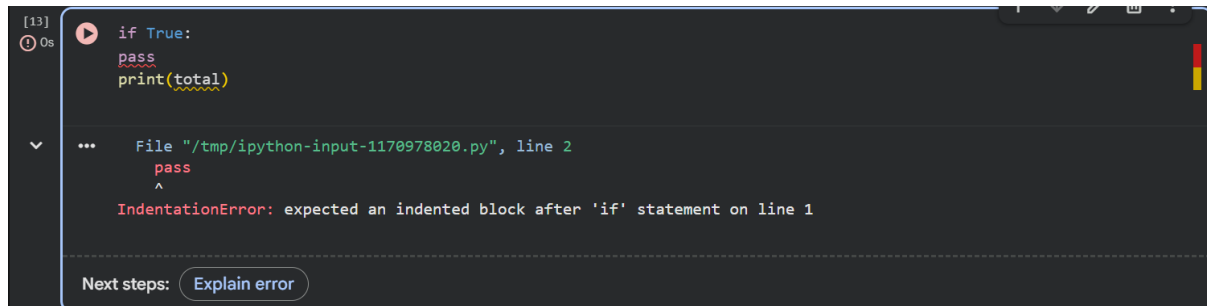
Task 4 – Uninitialized Variable Usage

(Buggy Code):

```
if True:
```

```
pass
```

```
print(total)
```



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

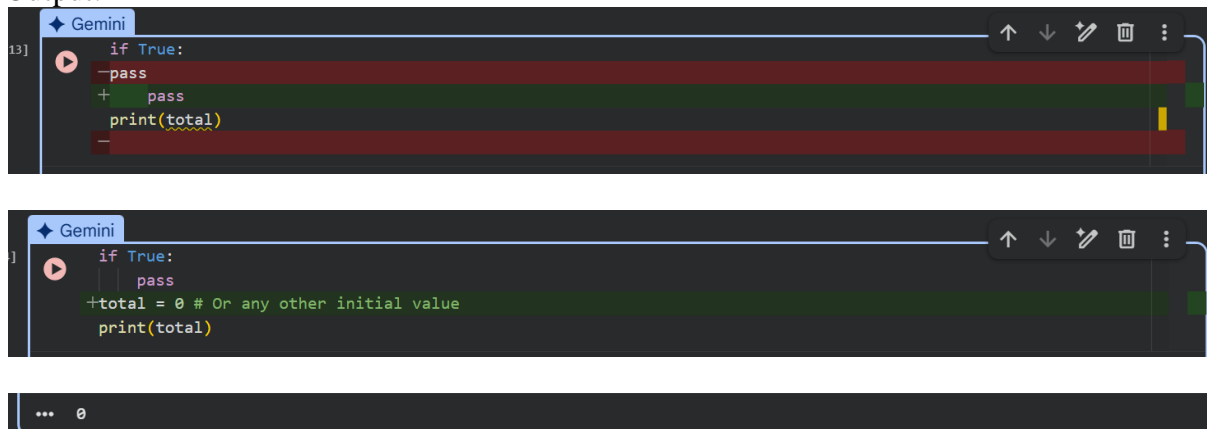
```
[13] if True:
      pass
      print(total)
```

The code is executed, and an error message is displayed:

```
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:



The first screenshot shows the original code with a red highlight on the `pass` statement and a green highlight on the `print(total)` statement. The second screenshot shows the corrected code with a green highlight on the `total` variable initialization:

```
if True:
    pass
    + total = 0 # Or any other initial value
    print(total)
```

The output of the corrected code is shown as:

```
... 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