

**School of Computer Science and Artificial Intelligence**

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**Lab Assignment # 7.2**

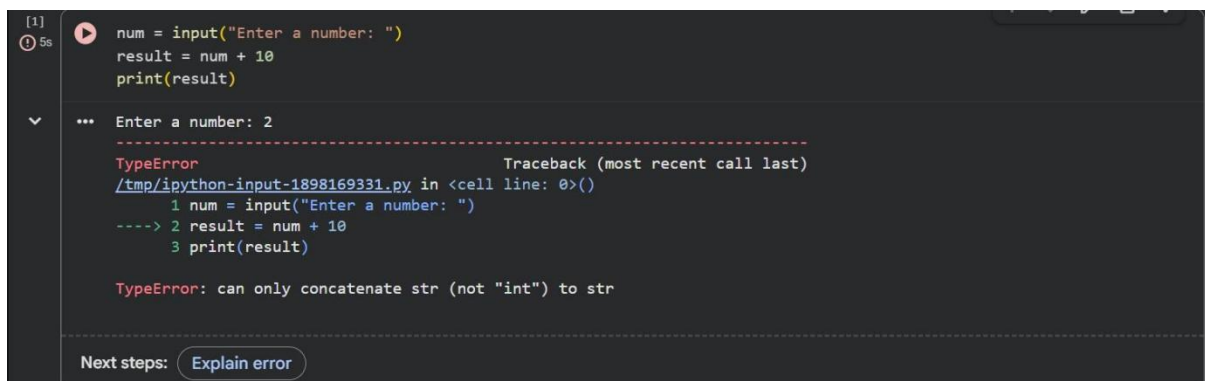
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Program	: B. Tech (CSE)
Specialization	:
Course Title	: AI Assisted Coding
Course Code	: 23CS002PC304
Semester	II
Academic Session	: 2025-2026
Name of Student	: Kothapally Srikanth
Enrollment No.	: 2403A51L42
Batch No.	: 52
Date	: 30-01-2026

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

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



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

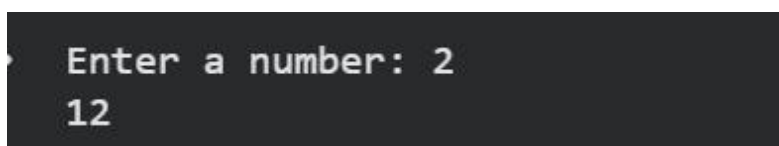
*** Enter a number: 2
-----
TypeError                                 Traceback (most recent call last)
/tmp/ipython-input-1898169331.py in <cell line: 0>()
      1 num = input("Enter a number: ")
----> 2 result = num + 10
      3 print(result)

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)
```

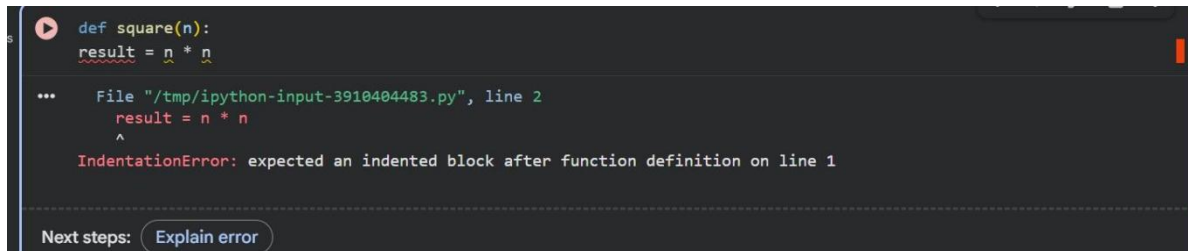


```
Enter a number: 2
12
```

## Task 2 – Incorrect Function Return Value

(Buggy Code):

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

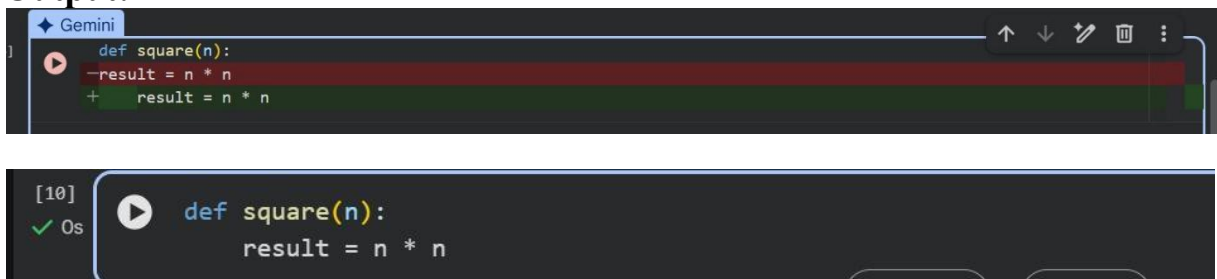


```
def square(n):
    result = n * n

... 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
    return result
```

[10] ✓ 0s

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

## Task-3 Index Error in List Traversal

(Buggy Code):

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

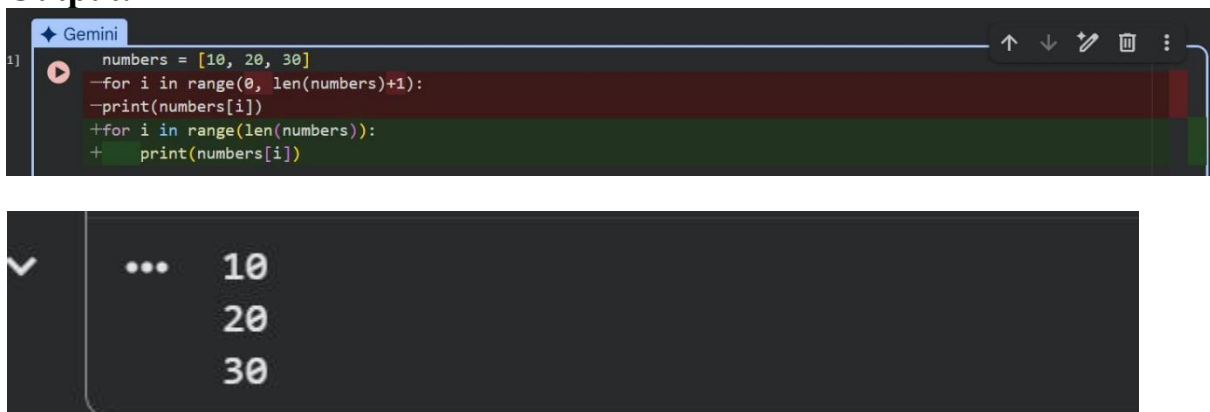


```
numbers = [10, 20, 30]
for i in range(0, len(numbers)+1):
    print(numbers[i])

... 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
```

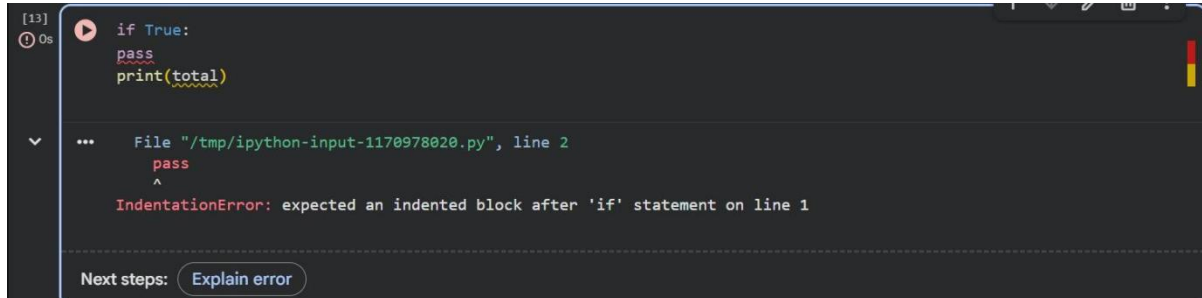
## Task 4 – Uninitialized Variable Usage

(Buggy Code):

if True:

pass

print(total)



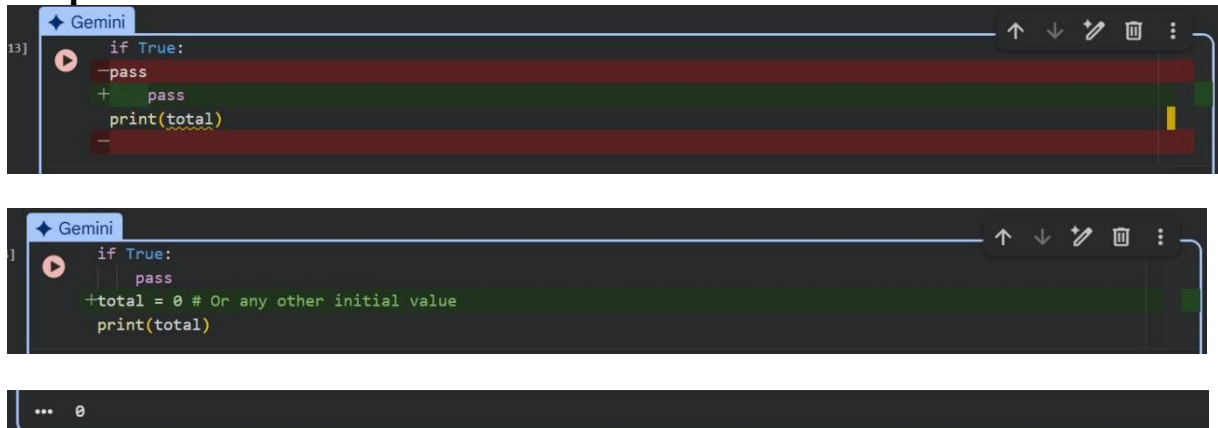
[13] 0s

```
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)
```

[1] 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)
```



The screenshot shows a code editor with the following Python code:

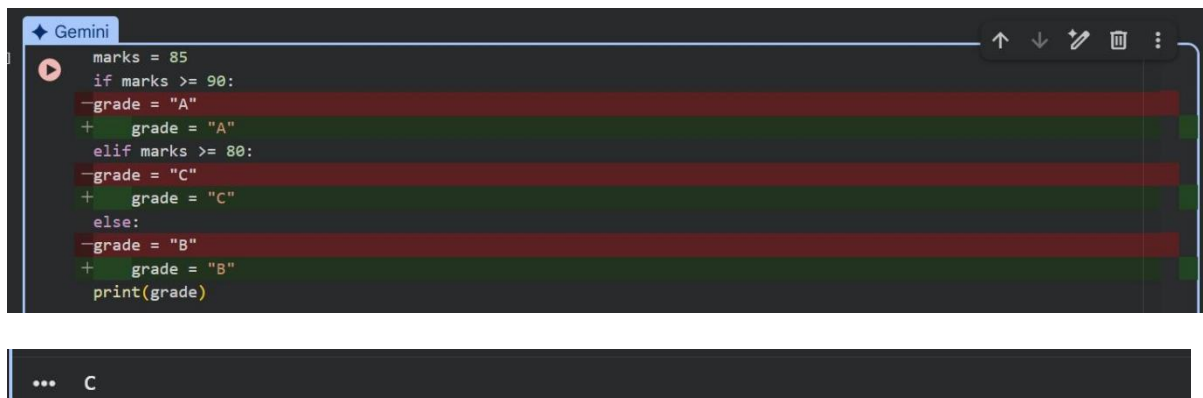
```
marks = 85
if marks >= 90:
    grade = "A"
elif marks >= 80:
    grade = "C"
else:
    grade = "B"
print(grade)
```

Below the code, an error message is displayed:

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

At the bottom, there is a button labeled "Explain error".

Output:



The screenshot shows a code editor with the following Python code:

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

Below the code, an error message is displayed:

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

At the bottom, there is a button labeled "Explain error".