SR UNIVERSITY

## 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** | **: Vemula Rikith** |
| **Enrollment No.** | **: 2403A51L35** |
| **Batch No.** | **: 52** |
| **Date** | **: 30/01/26** |

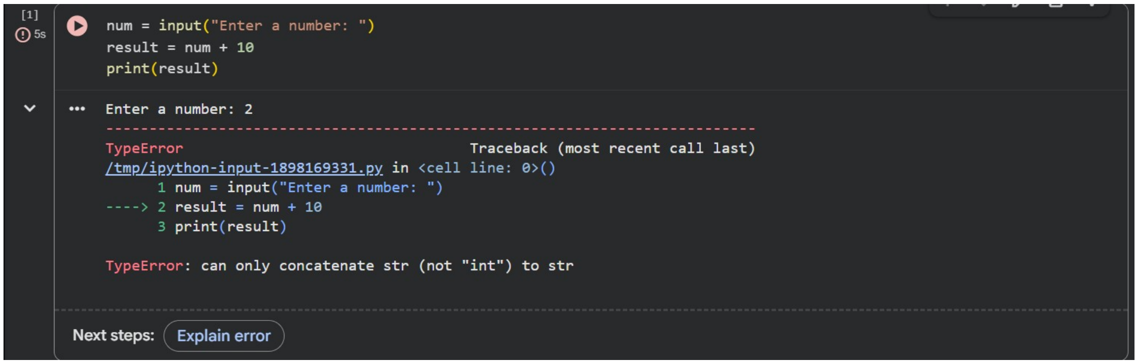
## Submission Starts here

## Screenshots:

## Task 1 – Runtime Error Due to Invalid Input Type

**(Buggy Code):**

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

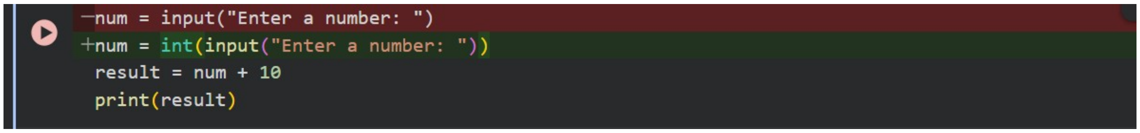


```
num = input("Enter a number: ")
result = num + 10
print(result)
```

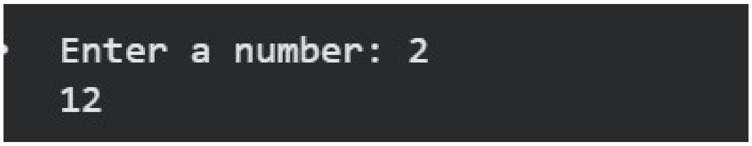
```
Enter a number: 2
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
/tmp/ipython-input-1898169331.py in <cell line: 0>()
      1 num = input("Enter a number: ")
----> 2 result = num + 10
      3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

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

Output:



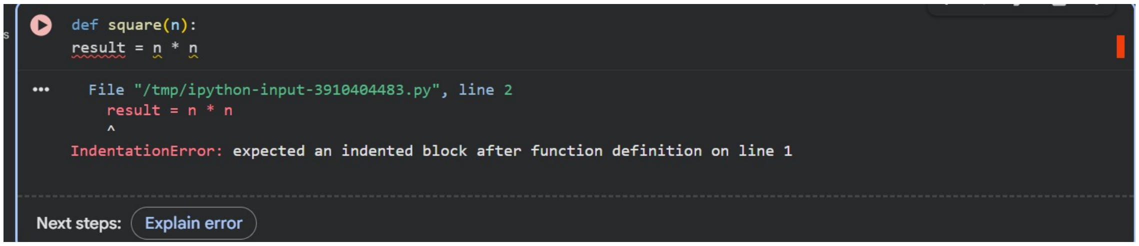
```
-num = input("Enter a number: ")
+num = int(input("Enter a number: "))
 result = num + 10
 print(result)
```



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

Task 2 – Incorrect Function Return Value

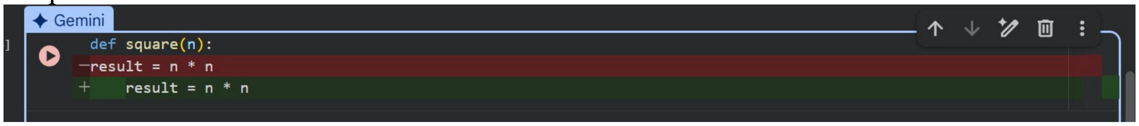
(Buggy Code):
def square(n):
result = n * n



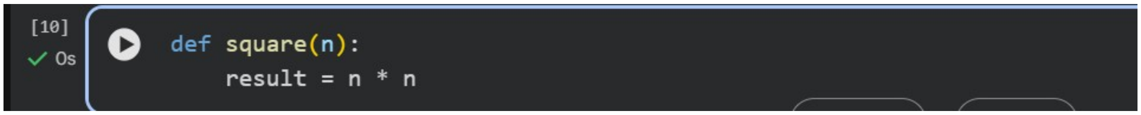
```
def square(n):
result = n * n

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

Output:



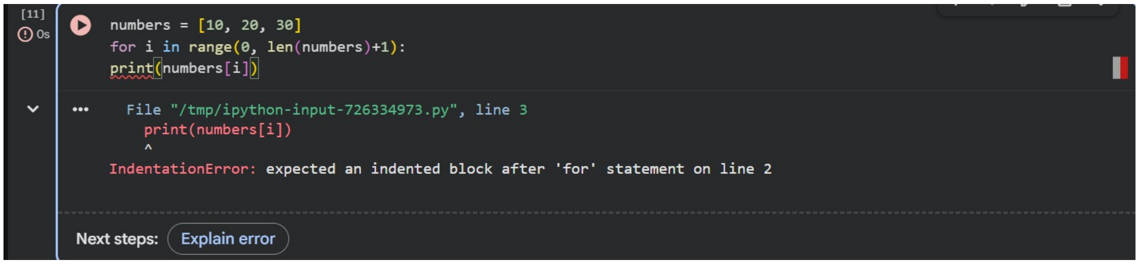
```
 def square(n):
-result = n * n
+    result = n * n
```



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

Task 3 – IndexError in List Traversal

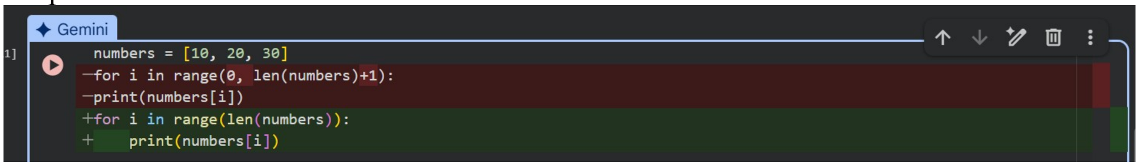
(Buggy Code):
numbers = [10, 20, 30]
for i in range(0, len(numbers)+1):
print(numbers[i])



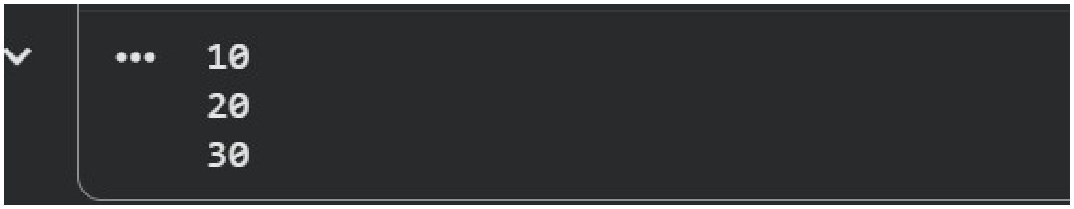
```
[11]
0s
numbers = [10, 20, 30]
for i in range(0, len(numbers)+1):
print(numbers[i])

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

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])
```

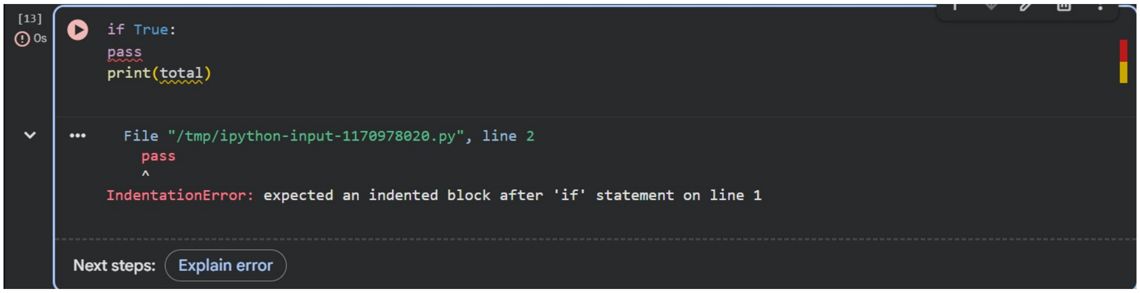


```
...   10
      20
      30
```

Task 4 – Uninitialized Variable Usage

(Buggy Code):

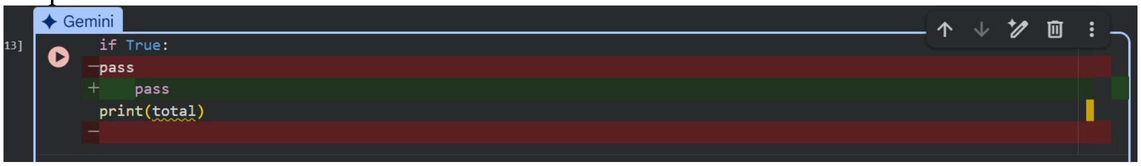
```
if True:
pass
print(total)
```



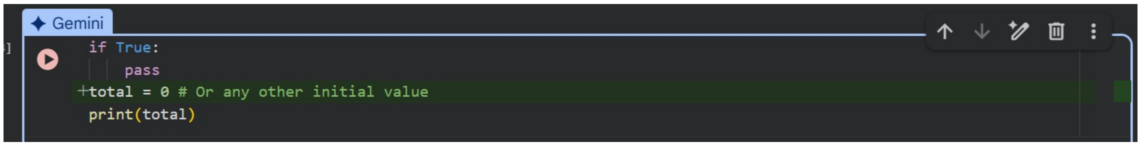
```
[13]
0s
if True:
pass
print(total)
```

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

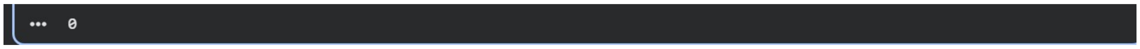
Output:



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



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

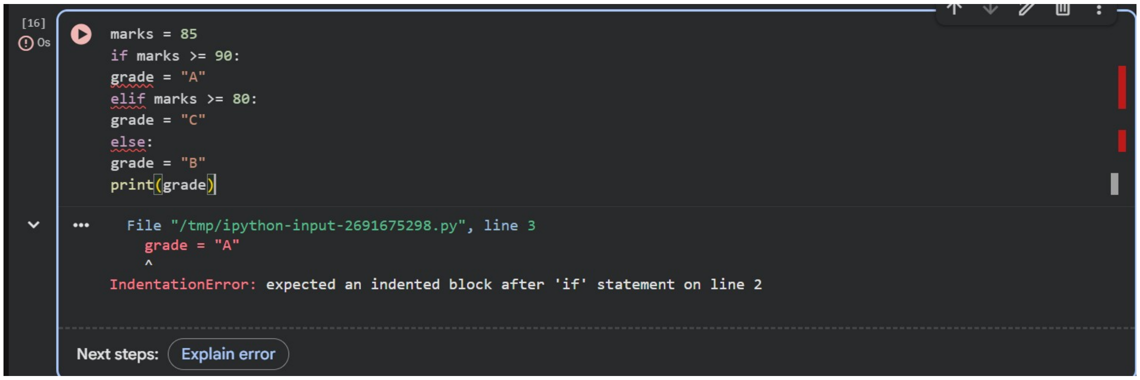


```
0
```

Task 5 – Logical Error in Student Grading System

(Buggy Code):

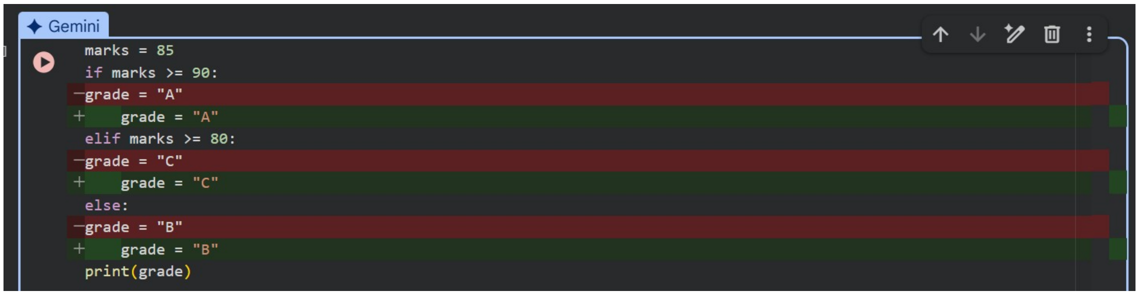
```
marks = 85
if marks >= 90:
grade = "A"
elif marks >= 80:
grade = "C"
else:
grade = "B"
print(grade)
```



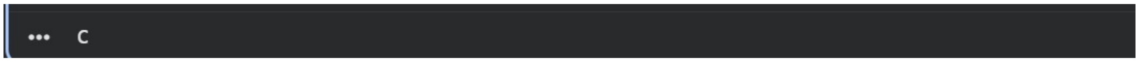
```
marks = 85
if marks >= 90:
grade = "A"
elif marks >= 80:
grade = "C"
else:
grade = "B"
print(grade)
```

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

Output:



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



```
C
```