SR UNIVERSITY

School of Computer Science and Artificial Intelligence

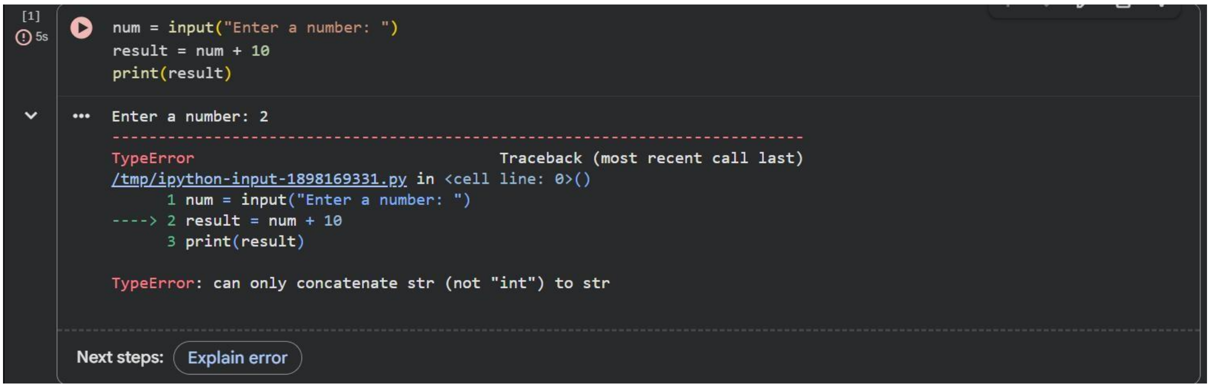
Lab Assignment # 7.2

Program	: B. Tech (CSE)
Specialization	:
Course Title	: AI Assisted Coding
Course Code	: 23CS002PC304
Semester	II
Academic Session	: 2025-2026
Name of Student	: R.Sai Kowshik
Enrollment No.	: 2403A51L23
Batch No.	: 51
Date	: 30-01-2026

Task 1 – Runtime Error Due to Invalid Input Type

(Buggy Code):

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

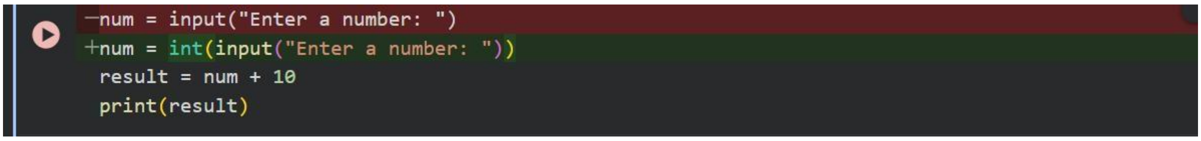


```
num = input("Enter a number: ")
result = num + 10
print(result)
```

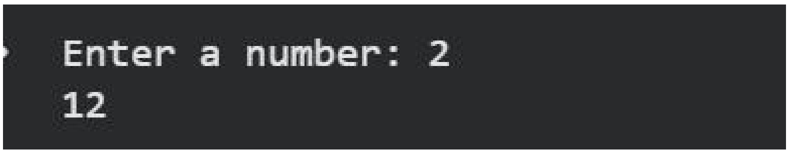
```
Enter a number: 2
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
/tmp/ipython-input-1898169331.py in <cell line: 0>()
      1 num = input("Enter a number: ")
----> 2 result = num + 10
      3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

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

Output:



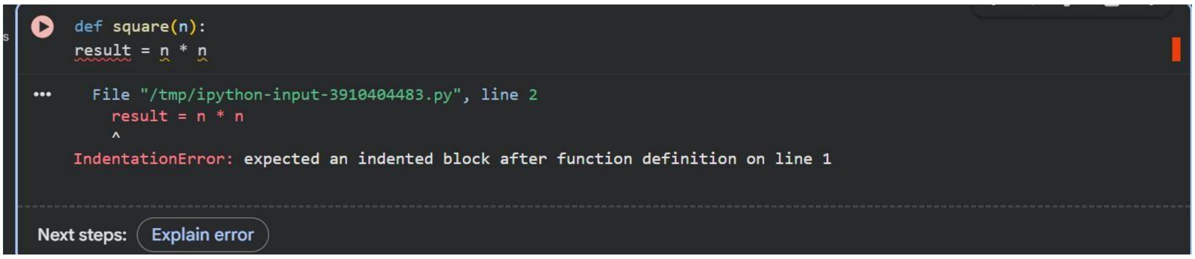
```
-num = input("Enter a number: ")
+num = int(input("Enter a number: "))
 result = num + 10
 print(result)
```



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

Task 2 – Incorrect Function Return Value

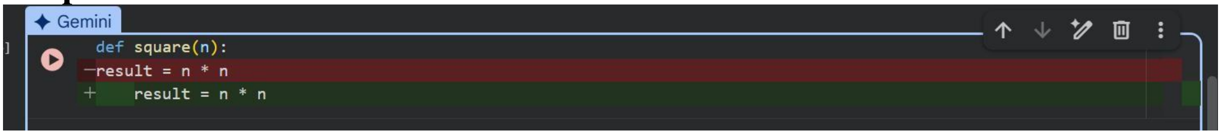
(Buggy Code):
def square(n):
result = n * n



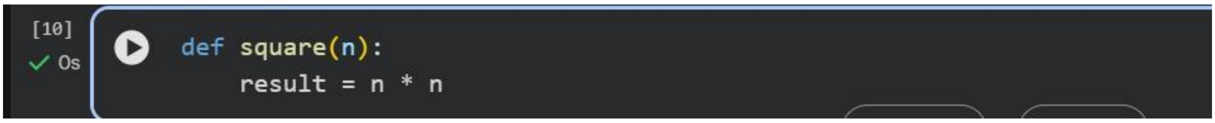
```
def square(n):
result = n * n
```

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

Output:



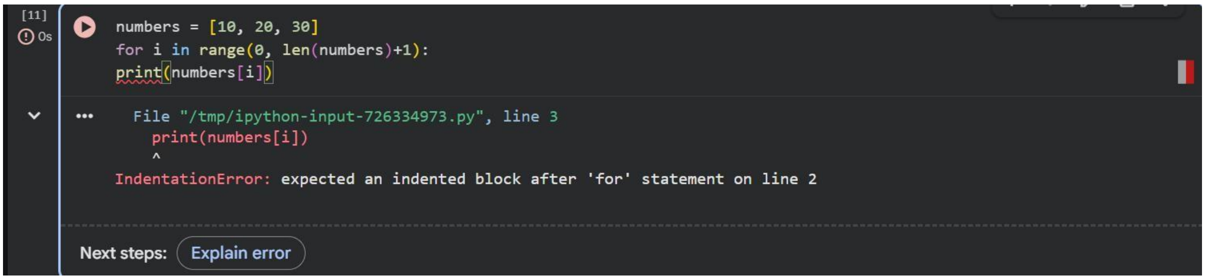
```
 def square(n):
-result = n * n
+    result = n * n
```



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

Task-3 Index Error in List Traversal

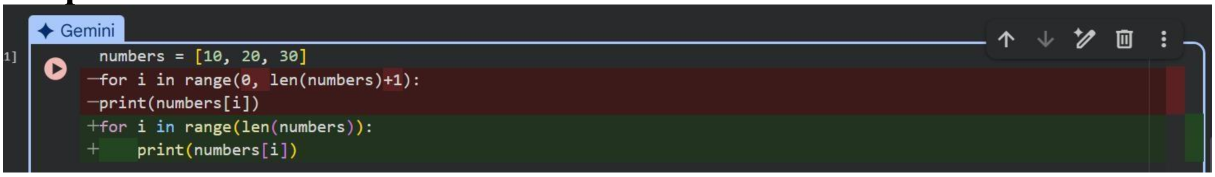
(Buggy Code):
numbers = [10, 20, 30]
for i in range(0, len(numbers)+1):
print(numbers[i])



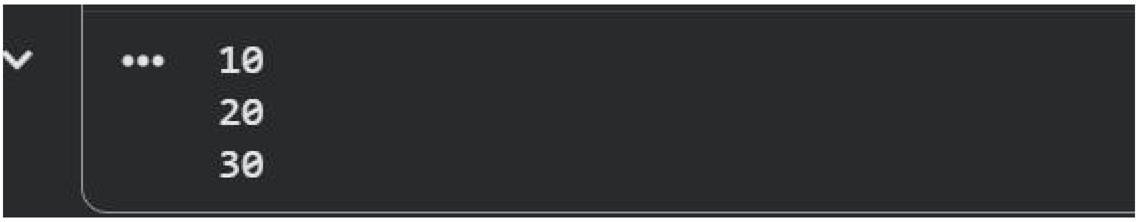
```
numbers = [10, 20, 30]
for i in range(0, len(numbers)+1):
print(numbers[i])
```

```
  File "/tmp/ipython-input-726334973.py", line 3
    print(numbers[i])
    ^
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
```

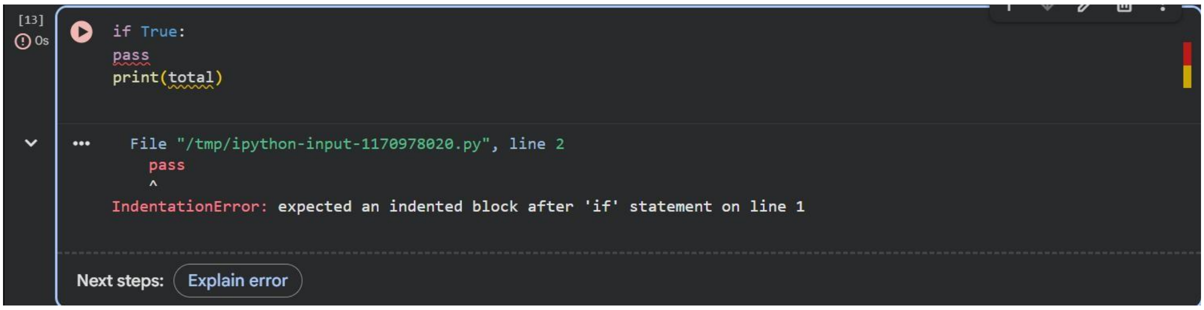
Task 4 – Uninitialized Variable Usage

(Buggy Code):

if True:

pass

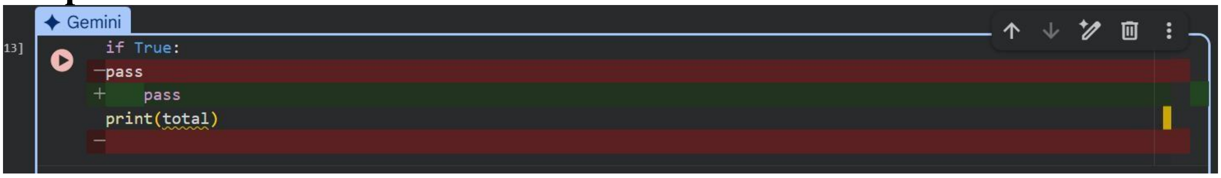
print(total)



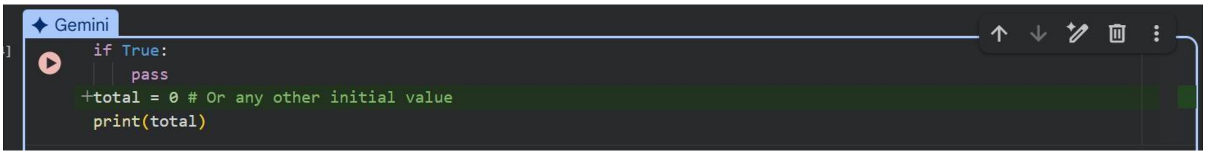
```
if True:
pass
print(total)
```

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

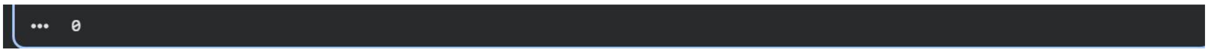
Output:



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



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

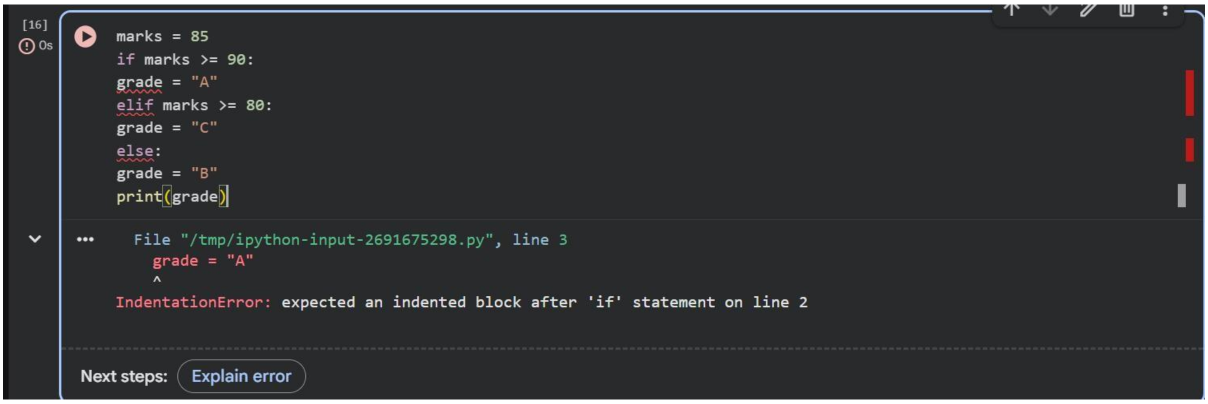


```
0
```

Task 5 – Logical Error in Student Grading System

(Buggy Code):

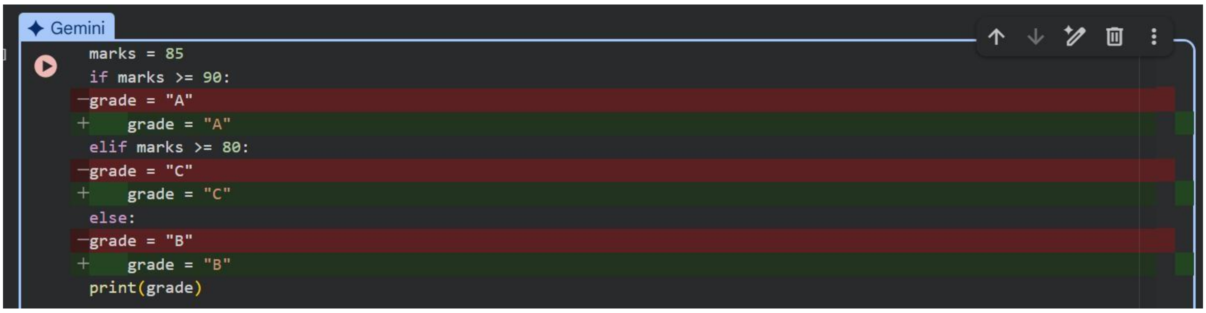
```
marks = 85
if marks >= 90: grade = "A"
elif marks >= 80:
grade = "C"
else:
grade ="B"
print(grade)
```



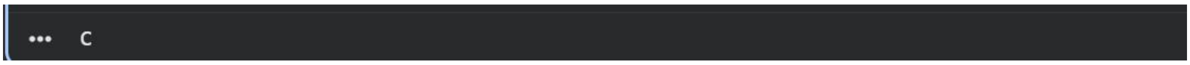
```
marks = 85
if marks >= 90:
grade = "A"
elif marks >= 80:
grade = "C"
else:
grade = "B"
print(grade)
```

```
  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
```