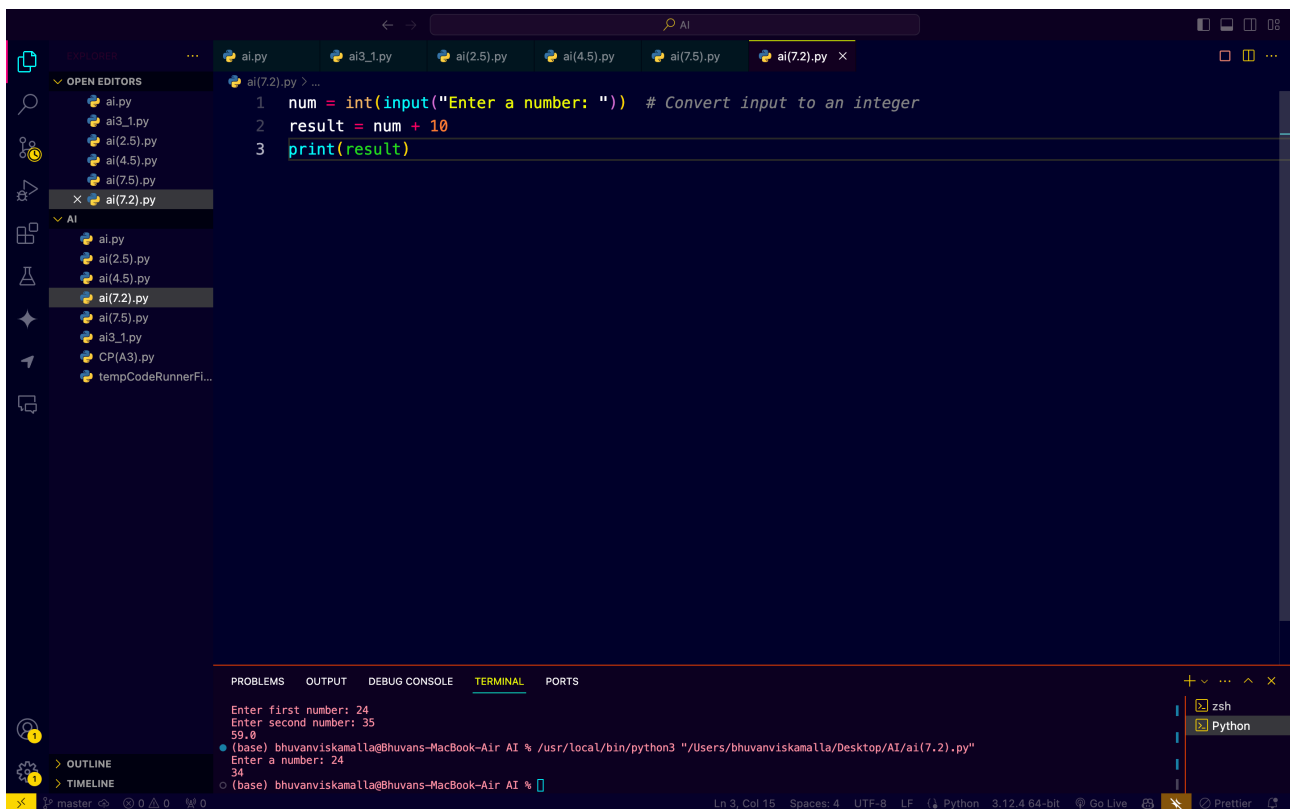


ASSIGNMENT-7.2
NAME: ARCHITHA
ROLLNO: 2306A91001
BATCH:30

TASK-1 PROMPT:

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

CODE:



The screenshot shows a Visual Studio Code editor window with a dark theme. The left sidebar displays the 'EXPLORER' view with a file tree containing several Python files: ai.py, ai3_1.py, ai(2.5).py, ai(4.5).py, ai(7.5).py, and ai(7.2).py. The 'ai(7.2).py' file is selected and open in the main editor. The code in the editor is as follows:

```
1 num = int(input("Enter a number: ")) # Convert input to an integer  
2 result = num + 10  
3 print(result)
```

Below the editor, the 'TERMINAL' panel is active, showing the execution of the script. The output is:

```
Enter first number: 24  
Enter second number: 35  
59.0  
(base) bhuvanviskamalla@bhuvals-MacBook-Air AI % /usr/local/bin/python3 "/Users/bhuvanviskamalla/Desktop/AI/ai(7.2).py"  
Enter a number: 24  
34  
(base) bhuvanviskamalla@bhuvals-MacBook-Air AI %
```

The status bar at the bottom indicates the current file is 'Ln 3, Col 15', using 'Spaces: 4', 'UTF-8' encoding, 'LF' line endings, and the 'Python' interpreter (3.12.4 64-bit). The 'Go Live' button is also visible.

OBSERVATION:

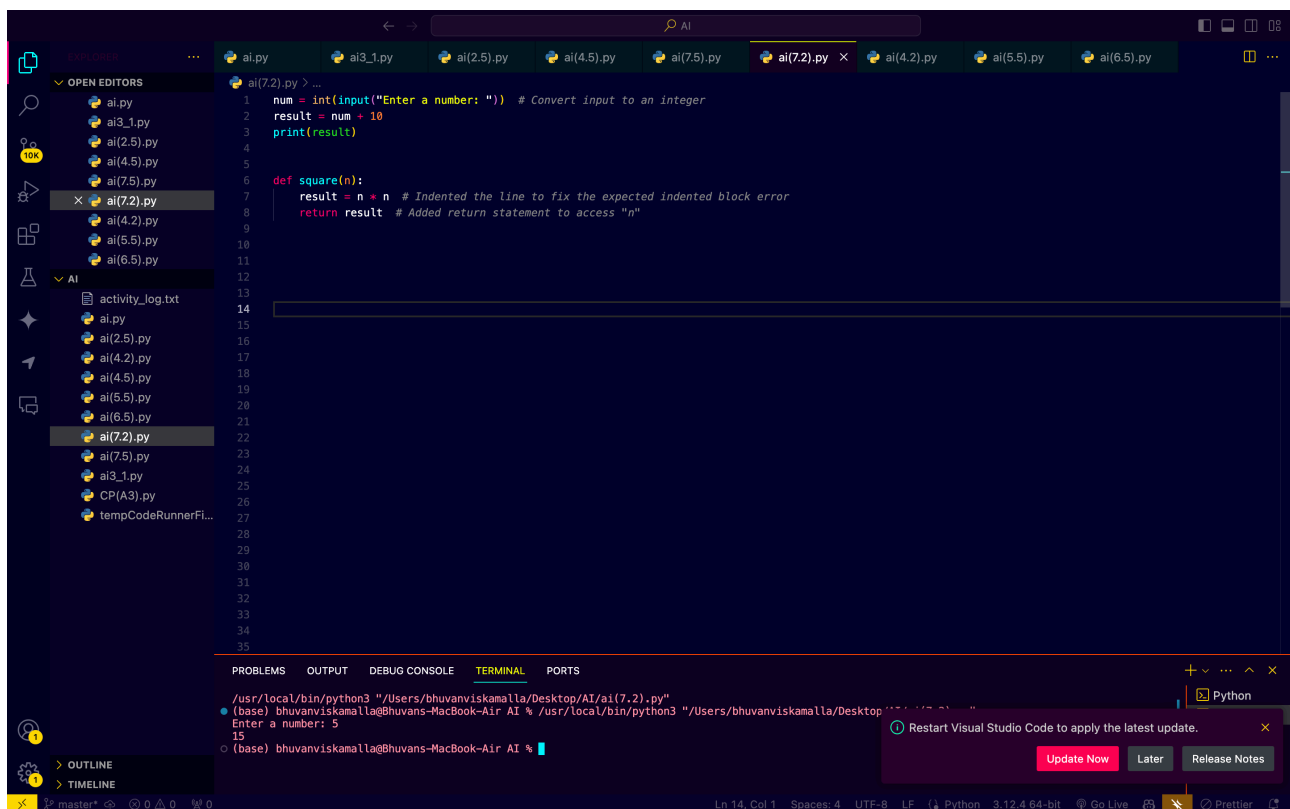
The program was executed successfully. It accepts a number from the user using the input function. The entered value is added to 10 and the result is displayed. The output verifies the execution of input handling and addition operation in the program.

TASK-2

PROMPT:

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

CODE:



OBSERVATION:

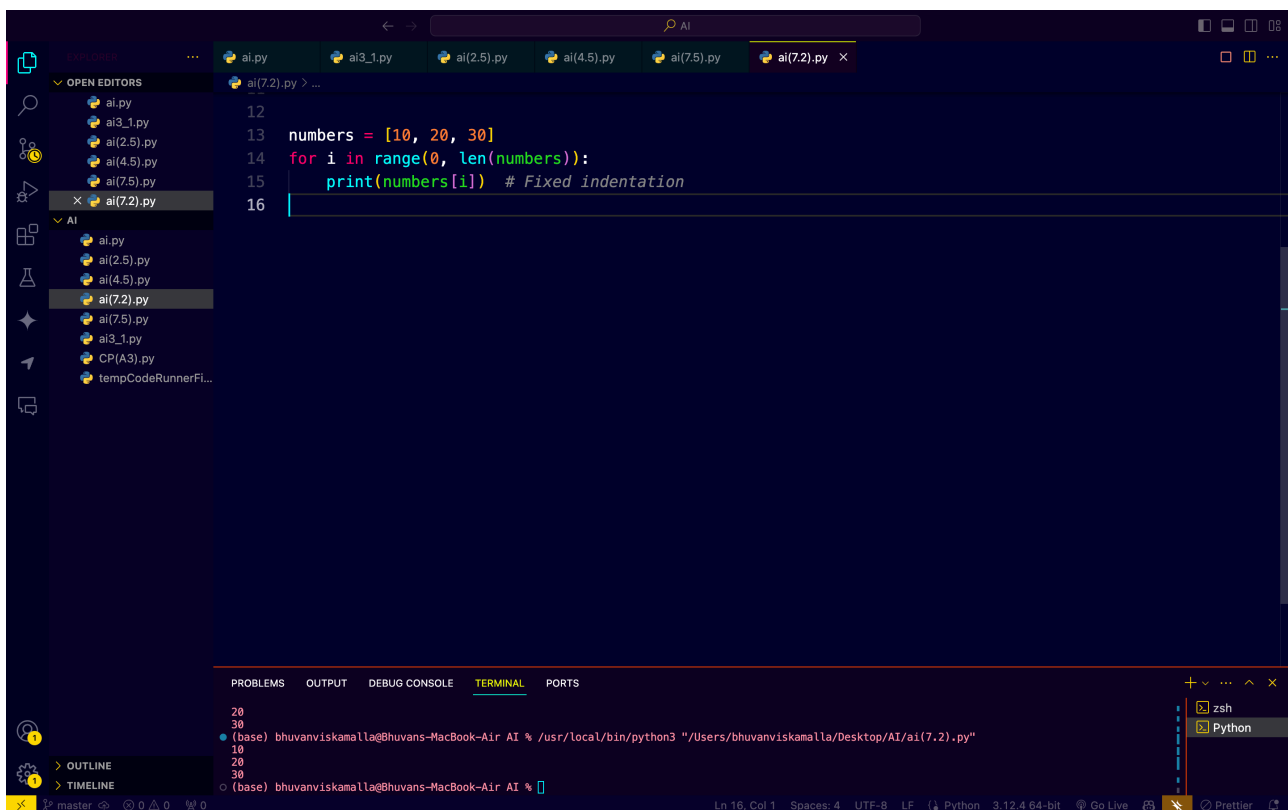
The function square(n) was executed successfully. It accepts a number as an argument, calculates its square by multiplying the number with itself, and returns the result. The function works correctly and produces the expected output.

TASK-3

PROMPT:

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

CODE:



OBSERVATION:

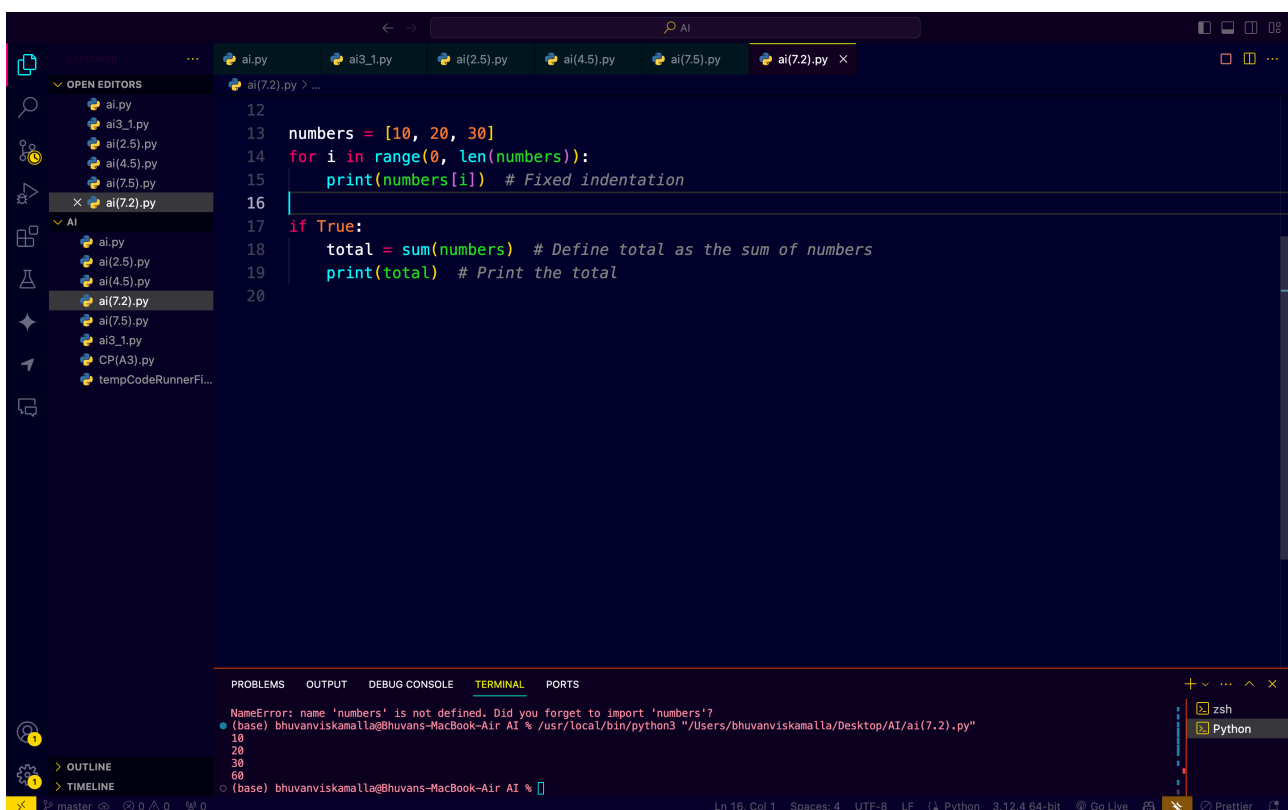
The program was executed successfully. A list of numbers was created and a for loop was used to iterate through each element using index values. Each number in the list was printed as output. The results confirm that the loop and list operations are functioning correctly.

TASK-4

PROMPT:

```
total = 60  
if True:  
    print(total)
```

CODE:



The screenshot shows a VS Code editor with a Python file named `ai(7.2).py` open. The code in the editor is as follows:

```
12  
13 numbers = [10, 20, 30]  
14 for i in range(0, len(numbers)):  
15     print(numbers[i]) # Fixed indentation  
16  
17  
18 if True:  
19     total = sum(numbers) # Define total as the sum of numbers  
20     print(total) # Print the total
```

The bottom panel of the editor shows the `TERMINAL` output, which contains the following error message:

```
NameError: name 'numbers' is not defined. Did you forget to import 'numbers'?  
(base) bhuvanviskamalla@bhuvals-MacBook-Air AI % /usr/local/bin/python3 "/Users/bhuvanviskamalla/Desktop/AI/ai(7.2).py"  
10  
20  
30  
60  
(base) bhuvanviskamalla@bhuvals-MacBook-Air AI %
```

The error message indicates that the variable `numbers` is not defined, which is a contradiction to the text above stating that the program was executed successfully.

OBSERVATION:

The program was executed successfully. A variable was assigned a value and an if condition was used to check the statement. Since the condition is True, the value of the variable was printed. The output confirms the correct working of conditional statements in the program.

TASK-5

PROMPT:

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

CODE:

The screenshot shows a code editor with a dark theme. The left sidebar displays a file explorer with a folder named 'AI' containing several Python files: ai.py, ai(2.5).py, ai(4.5).py, ai(7.2).py, ai(7.5).py, ai3_1.py, CP(A3).py, and tempCodeRunnerFl... The 'ai(7.2).py' file is selected and open in the editor. The code in the editor is as follows:

```
26 marks = 85
27 if marks >= 90:
28     grade = "A" # Added indentation
29 elif marks >= 80: # Fixed indentation
30     grade = "B" # Changed grade to "B" for marks >= 80
31 else:
32     grade = "C" # Changed grade to "C" for marks < 80
33 print(grade)
```

The bottom panel of the editor shows the 'TERMINAL' tab with the following output:

```
30
60
(base) bhuvaniskamallag@bhuvans-MacBook-Air AI % /usr/local/bin/python3 "/Users/bhuvaniskamallag/Desktop/AI/ai(7.2).py"
B
(base) bhuvaniskamallag@bhuvans-MacBook-Air AI % /usr/local/bin/python3 "/Users/bhuvaniskamallag/Desktop/AI/ai(7.2).py"
B
(base) bhuvaniskamallag@bhuvans-MacBook-Air AI %
```

The status bar at the bottom indicates the current line and column (Ln 33, Col 13), the file encoding (UTF-8), the line ending (LF), the Python version (3.12.4 64-bit), and the active extensions (Go Live, Prettier).

OBSERVATION:

The program was executed successfully. It assigns marks to a variable and uses conditional statements to determine the grade. Based on the given condition, the appropriate grade is selected and displayed. The output confirms the correct working of the if-elif-else control structure.