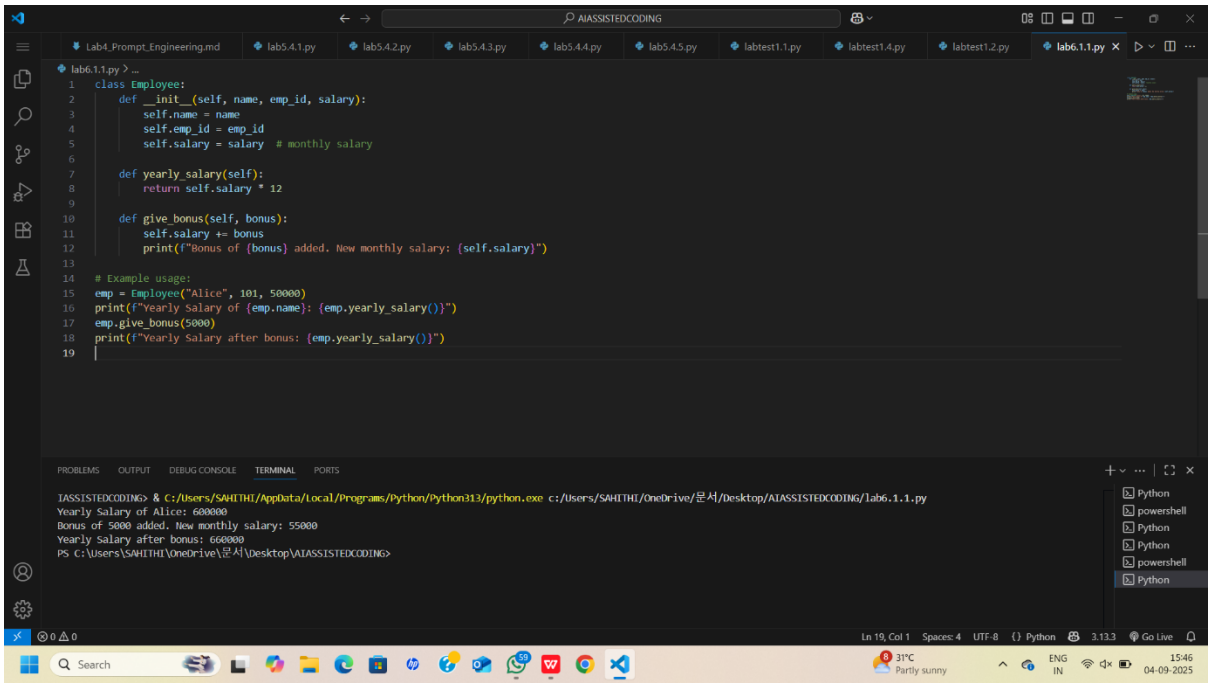
Assignment-6.1

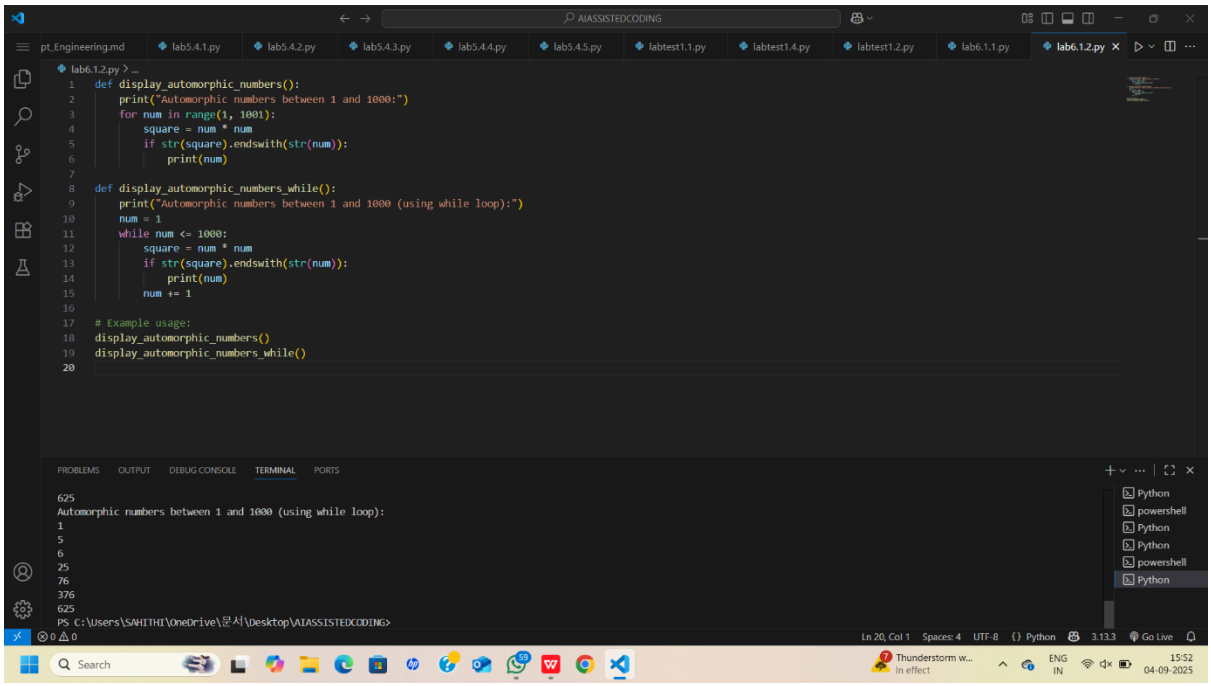
Rollno-2403A51294 **Date of submission:04-09-2025**

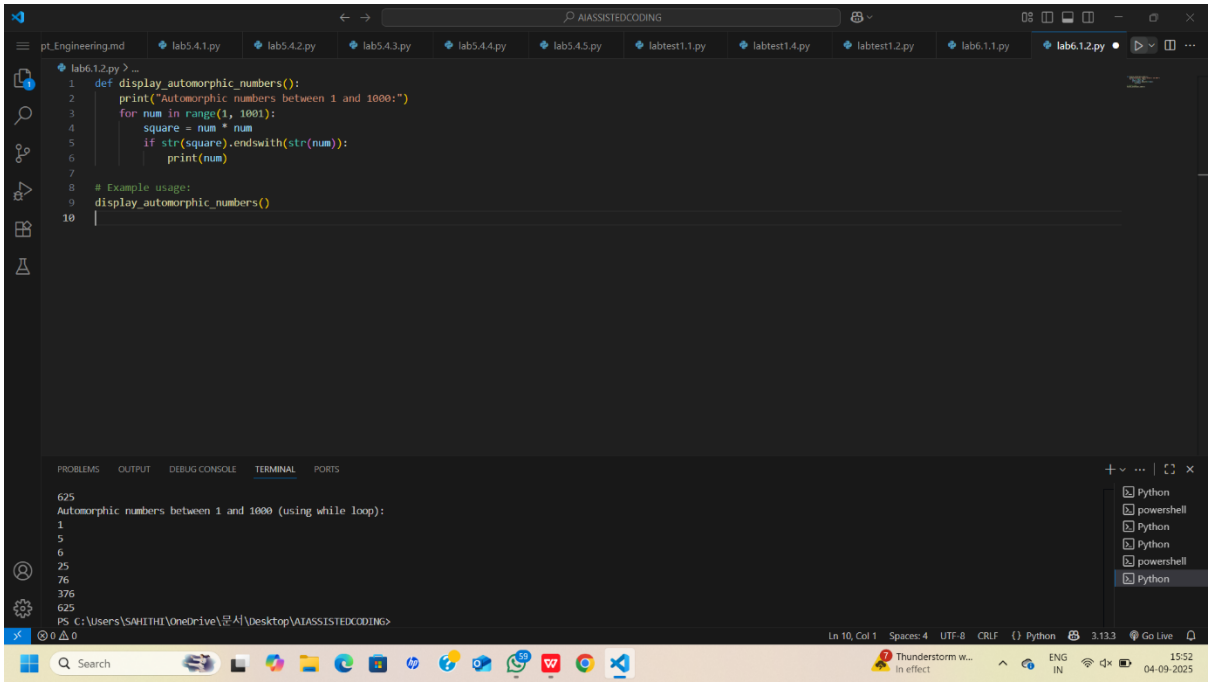
Batch-Cse12

Number:6.1.1

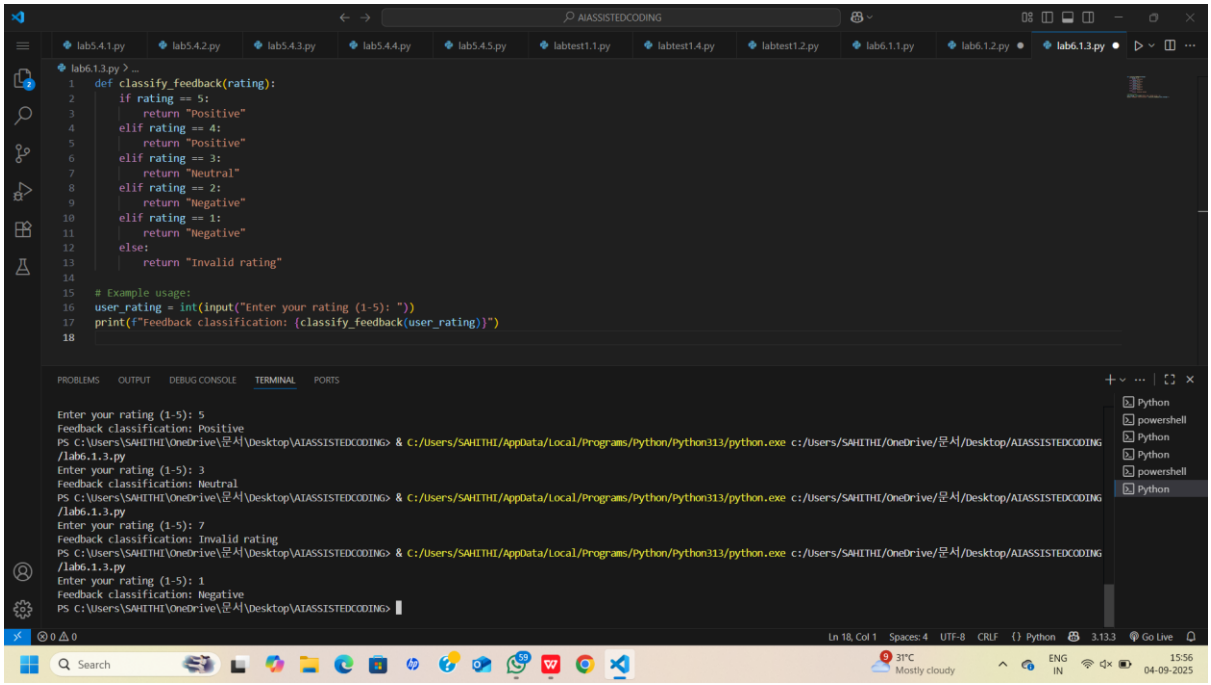


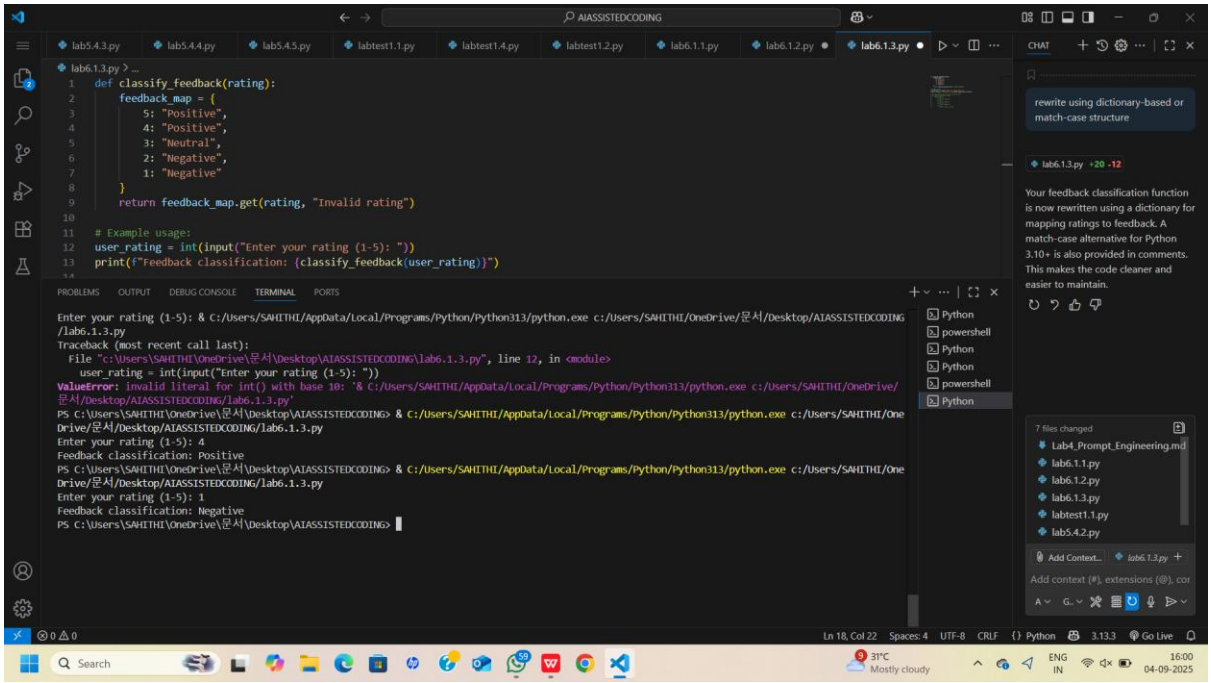
Number:6.1.2

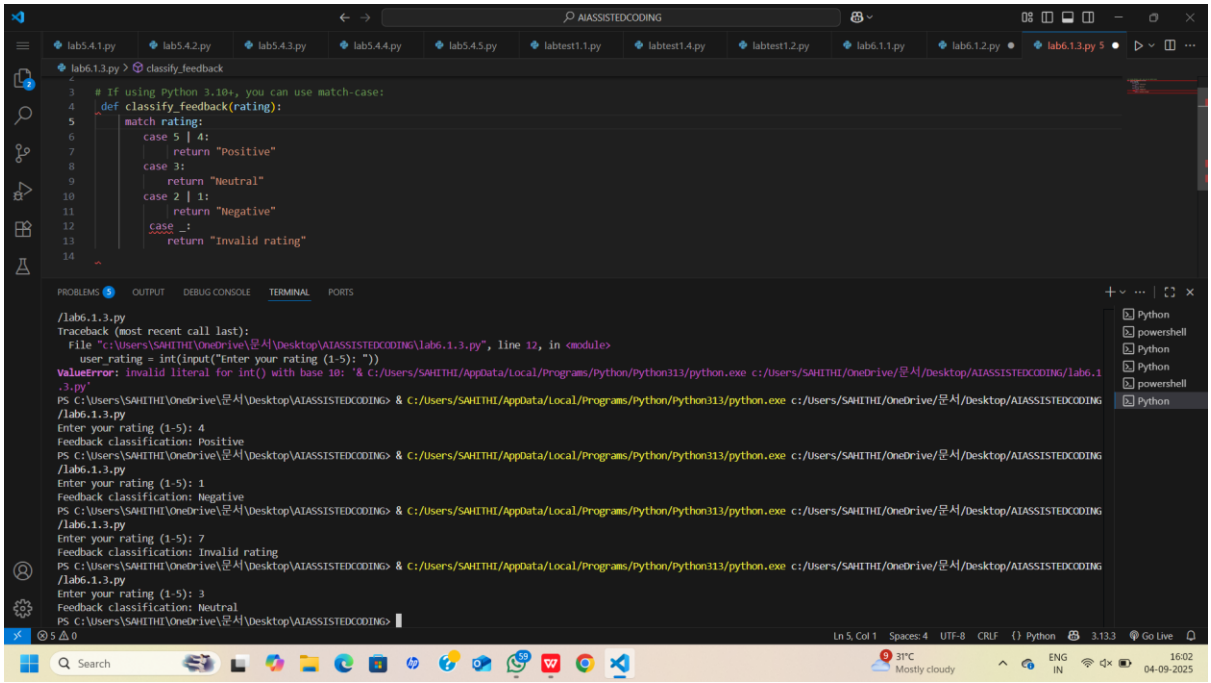



AIASSISTEDCODING
lab6.1.2.py
def display_automorphic_numbers():
print("Automorphic numbers between 1 and 1000:")
for num in range(1, 1001):
square = num * num
if str(square).endswith(str(num)):
print(num)
# Example usage:
display_automorphic_numbers()
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
625
Automorphic numbers between 1 and 1000 (using while loop):
1
5
6
25
76
376
625
PS C:\Users\SAHITHI\OneDrive\문서\Desktop\AIASSISTEDCODING>

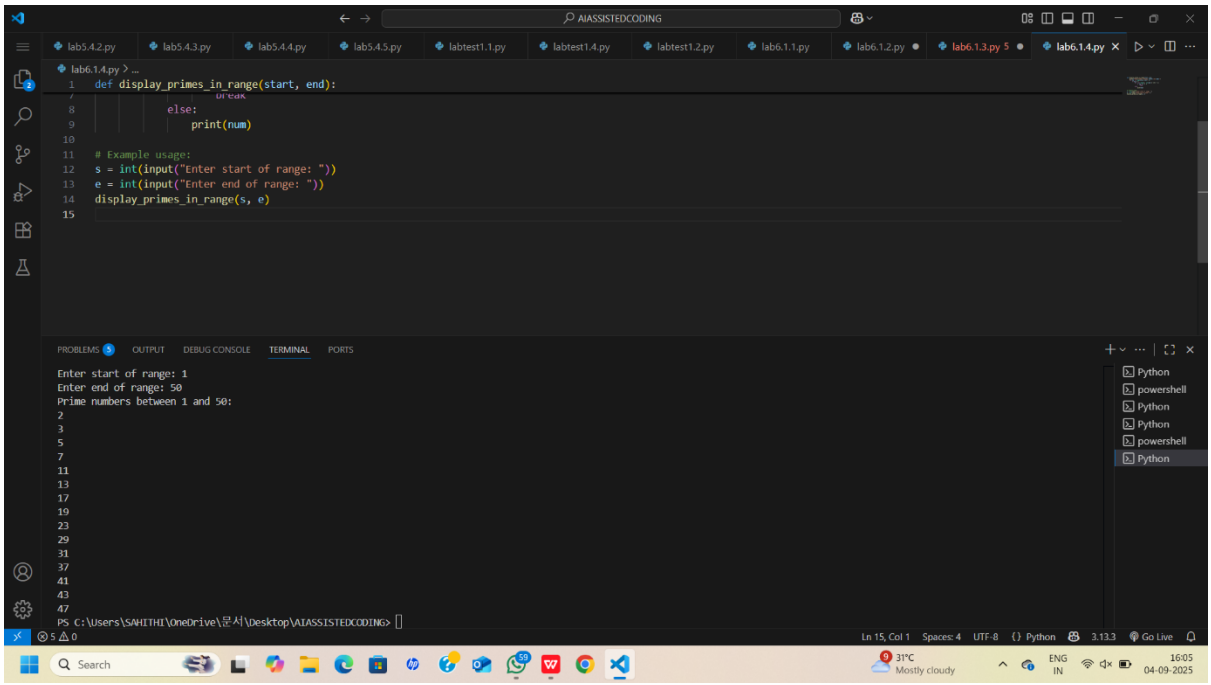
Number:6.1.3

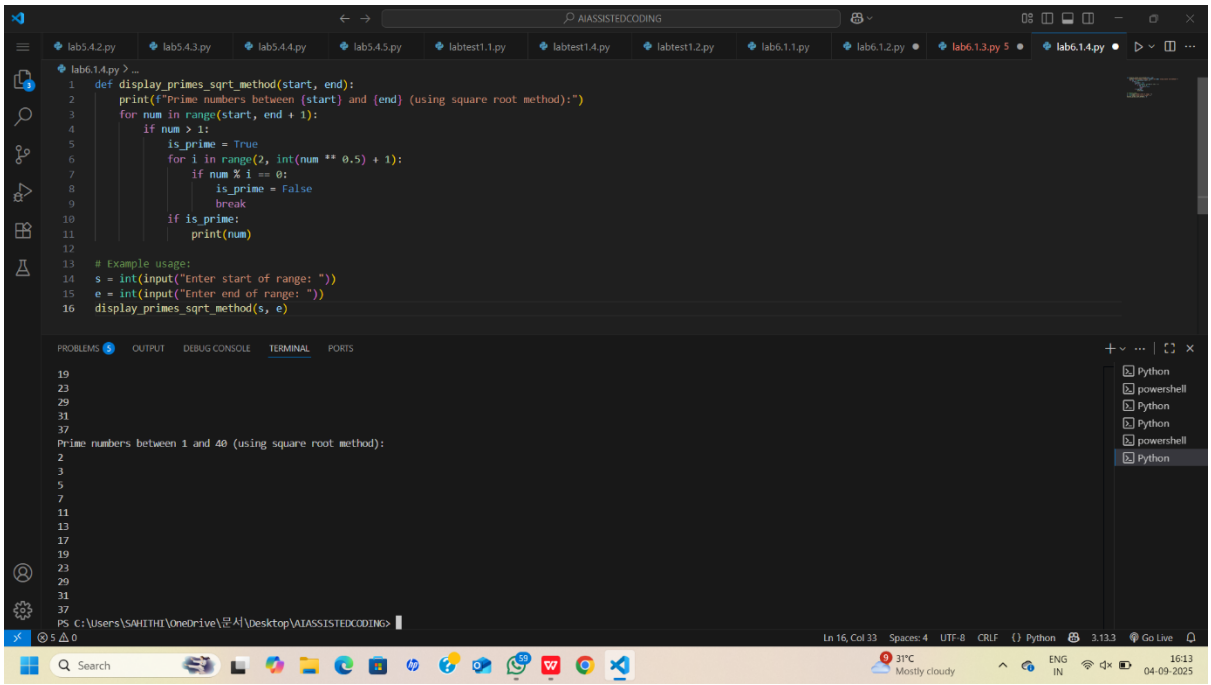

AIASSISTEDCODING
lab6.1.3.py
def classify_feedback(rating):
if rating == 5:
return "Positive"
elif rating == 4:
return "Positive"
elif rating == 3:
return "Neutral"
elif rating == 2:
return "Negative"
elif rating == 1:
return "Negative"
else:
return "Invalid rating"
# Example usage:
user_rating = int(input("Enter your rating (1-5): "))
print(f"Feedback classification: {classify_feedback(user_rating)}")
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Enter your rating (1-5): 5
Feedback classification: Positive
PS C:\Users\SAHITHI\OneDrive\문서\Desktop\AIASSISTEDCODING> & C:/Users/SAHITHI/AppData/Local/Programs/Python/Python313/python.exe c:/Users/SAHITHI/OneDrive/문서/Desktop/AIASSISTEDCODING/lab6.1.3.py
Enter your rating (1-5): 3
Feedback classification: Neutral
PS C:\Users\SAHITHI\OneDrive\문서\Desktop\AIASSISTEDCODING> & C:/Users/SAHITHI/AppData/Local/Programs/Python/Python313/python.exe c:/Users/SAHITHI/OneDrive/문서/Desktop/AIASSISTEDCODING/lab6.1.3.py
Enter your rating (1-5): 7
Feedback classification: Invalid rating
PS C:\Users\SAHITHI\OneDrive\문서\Desktop\AIASSISTEDCODING> & C:/Users/SAHITHI/AppData/Local/Programs/Python/Python313/python.exe c:/Users/SAHITHI/OneDrive/문서/Desktop/AIASSISTEDCODING/lab6.1.3.py
Enter your rating (1-5): 1
Feedback classification: Negative
PS C:\Users\SAHITHI\OneDrive\문서\Desktop\AIASSISTEDCODING>


AIASSISTEDCODING
lab6.1.3.py
def classify_feedback(rating):
feedback_map = {
5: "Positive",
4: "Positive",
3: "Neutral",
2: "Negative",
1: "Negative"
}
return feedback_map.get(rating, "Invalid rating")
# Example usage:
user_rating = int(input("Enter your rating (1-5): "))
print(f"Feedback classification: {classify_feedback(user_rating)}")
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Enter your rating (1-5): & C:/Users/SAHITHI/AppData/Local/Programs/Python/Python313/python.exe c:/Users/SAHITHI/OneDrive/문서/Desktop/AIASSISTEDCODING
/lab6.1.3.py
Traceback (most recent call last):
File "c:\Users\SAHITHI\OneDrive\문서\Desktop\AIASSISTEDCODING\lab6.1.3.py", line 12, in <module>
user_rating = int(input("Enter your rating (1-5): "))
ValueError: invalid literal for int() with base 10: '& C:/Users/SAHITHI/AppData/Local/Programs/Python/Python313/python.exe c:/Users/SAHITHI/OneDrive/
문서/Desktop/AIASSISTEDCODING/lab6.1.3.py'
PS C:\Users\SAHITHI\OneDrive\문서\Desktop\AIASSISTEDCODING> & C:/Users/SAHITHI/AppData/Local/Programs/Python/Python313/python.exe c:/Users/SAHITHI/One
Drive/문서/Desktop/AIASSISTEDCODING/lab6.1.3.py
Enter your rating (1-5): 4
Feedback classification: Positive
PS C:\Users\SAHITHI\OneDrive\문서\Desktop\AIASSISTEDCODING> & C:/Users/SAHITHI/AppData/Local/Programs/Python/Python313/python.exe c:/Users/SAHITHI/One
Drive/문서/Desktop/AIASSISTEDCODING/lab6.1.3.py
Enter your rating (1-5): 1
Feedback classification: Negative
PS C:\Users\SAHITHI\OneDrive\문서\Desktop\AIASSISTEDCODING>
CHAT
rewrite using dictionary-based or match-case structure
lab6.1.3.py +20 -12
Your feedback classification function is now rewritten using a dictionary for mapping ratings to feedback. A match-case alternative for Python 3.10+ is also provided in comments. This makes the code cleaner and easier to maintain.
7 files changed
Lab4_Prompt_Engineering.md
lab6.1.1.py
lab6.1.2.py
lab6.1.3.py
labtest1.1.py
lab5.4.2.py
Add Context...
Add context (#), extensions (@), cor
Ln 18, Col 22 Spaces: 4 UTF-8 CRLF Python 3.13.3 Go Live
Search
31°C Mostly cloudy
ENG IN
16:00 04-09-2025

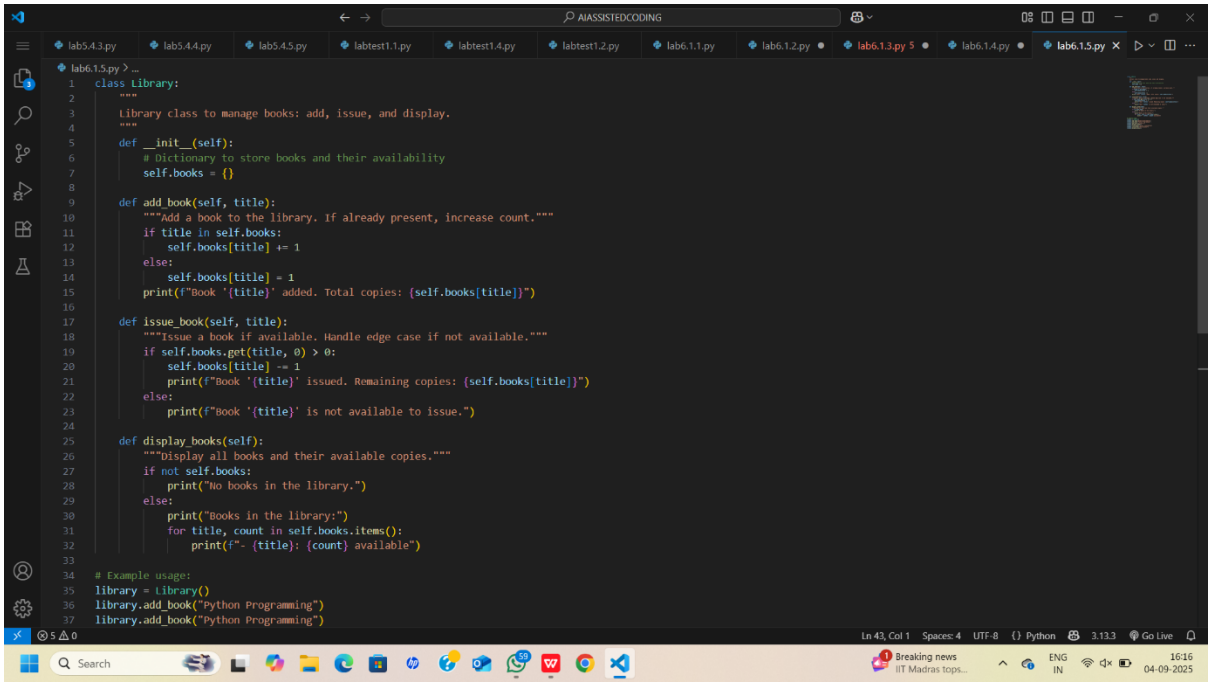

AIASSISTEDCODING
lab6.1.3.py
# If using Python 3.10+, you can use match-case:
def classify_feedback(rating):
match rating:
case 5 | 4:
return "Positive"
case 3:
return "Neutral"
case 2 | 1:
return "Negative"
case _:
return "Invalid rating"
PROBLEMS 5 OUTPUT DEBUG CONSOLE TERMINAL PORTS
/lab6.1.3.py
Traceback (most recent call last):
File "c:\Users\SAHITHI\OneDrive\문서\Desktop\AIASSISTEDCODING\lab6.1.3.py", line 12, in <module>
user_rating = int(input("Enter your rating (1-5): "))
ValueError: invalid literal for int() with base 10: '& C:/Users/SAHITHI/AppData/Local/Programs/Python/Python313/python.exe c:/Users/SAHITHI/OneDrive/문서/Desktop/AIASSISTEDCODING/lab6.1
.3.py'
PS C:\Users\SAHITHI\OneDrive\문서\Desktop\AIASSISTEDCODING> & C:/Users/SAHITHI/AppData/Local/Programs/Python/Python313/python.exe c:/Users/SAHITHI/OneDrive/문서/Desktop/AIASSISTEDCODING
/lab6.1.3.py
Enter your rating (1-5): 4
Feedback classification: Positive
PS C:\Users\SAHITHI\OneDrive\문서\Desktop\AIASSISTEDCODING> & C:/Users/SAHITHI/AppData/Local/Programs/Python/Python313/python.exe c:/Users/SAHITHI/OneDrive/문서/Desktop/AIASSISTEDCODING
/lab6.1.3.py
Enter your rating (1-5): 1
Feedback classification: Negative
PS C:\Users\SAHITHI\OneDrive\문서\Desktop\AIASSISTEDCODING> & C:/Users/SAHITHI/AppData/Local/Programs/Python/Python313/python.exe c:/Users/SAHITHI/OneDrive/문서/Desktop/AIASSISTEDCODING
/lab6.1.3.py
Enter your rating (1-5): 7
Feedback classification: Invalid rating
PS C:\Users\SAHITHI\OneDrive\문서\Desktop\AIASSISTEDCODING> & C:/Users/SAHITHI/AppData/Local/Programs/Python/Python313/python.exe c:/Users/SAHITHI/OneDrive/문서/Desktop/AIASSISTEDCODING
/lab6.1.3.py
Enter your rating (1-5): 3
Feedback classification: Neutral
PS C:\Users\SAHITHI\OneDrive\문서\Desktop\AIASSISTEDCODING>
Ln 5, Col 1 Spaces: 4 UTF-8 CRLF Python 3.13.3 Go Live
Search
31°C Mostly cloudy
ENG IN
16:02 04-09-2025

Number:6.1.4


AIASSISTEDCODING
lab6.1.4.py
def display_primes_in_range(start, end):
else:
print(num)
# Example usage:
s = int(input("Enter start of range: "))
e = int(input("Enter end of range: "))
display_primes_in_range(s, e)
PROBLEMS 5 OUTPUT DEBUG CONSOLE TERMINAL PORTS
Enter start of range: 1
Enter end of range: 50
Prime numbers between 1 and 50:
2
3
5
7
11
13
17
19
23
29
31
37
41
43
47
PS C:\Users\SAHITHI\OneDrive\문서\Desktop\AIASSISTEDCODING>
Ln 15, Col 1 Spaces: 4 UTF-8 Python 3.13.3 Go Live
31°C Mostly cloudy
ENG IN
16:05
04-09-2025


AIASSISTEDCODING
lab6.1.4.py
def display_primes_sqrt_method(start, end):
print(f"Prime numbers between {start} and {end} (using square root method):")
for num in range(start, end + 1):
if num > 1:
is_prime = True
for i in range(2, int(num ** 0.5) + 1):
if num % i == 0:
is_prime = False
break
if is_prime:
print(num)
# Example usage:
s = int(input("Enter start of range: "))
e = int(input("Enter end of range: "))
display_primes_sqrt_method(s, e)
PROBLEMS 5 OUTPUT DEBUG CONSOLE TERMINAL PORTS
19
23
29
31
37
Prime numbers between 1 and 40 (using square root method):
2
3
5
7
11
13
17
19
23
29
31
37
PS C:\Users\SAHITHI\OneDrive\문서\Desktop\AIASSISTEDCODING>
Ln 16, Col 33 Spaces: 4 UTF-8 CRLF Python 3.13.3 Go Live
31°C Mostly cloudy
ENG IN
16:13
04-09-2025

Number:6.1.5



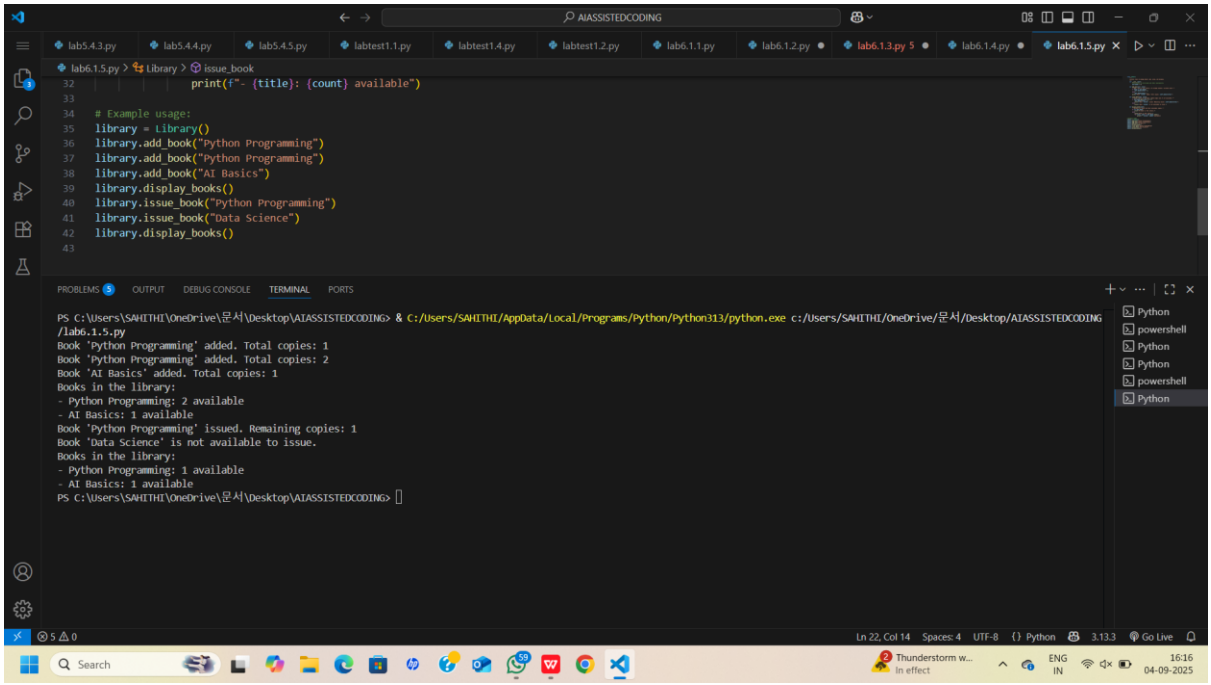
```python
class Library:
    """
    Library class to manage books: add, issue, and display.
    """
    def __init__(self):
        # Dictionary to store books and their availability
        self.books = {}

    def add_book(self, title):
        """Add a book to the library. If already present, increase count."""
        if title in self.books:
            self.books[title] += 1
        else:
            self.books[title] = 1
        print(f"Book '{title}' added. Total copies: {self.books[title]}")

    def issue_book(self, title):
        """Issue a book if available. Handle edge case if not available."""
        if self.books.get(title, 0) > 0:
            self.books[title] -= 1
            print(f"Book '{title}' issued. Remaining copies: {self.books[title]}")
        else:
            print(f"Book '{title}' is not available to issue.")

    def display_books(self):
        """Display all books and their available copies."""
        if not self.books:
            print("No books in the library.")
        else:
            print("Books in the library:")
            for title, count in self.books.items():
                print(f"- {title}: {count} available")

# Example usage:
library = Library()
library.add_book("Python Programming")
library.add_book("Python Programming")
```



```python
                print(f"- {title}: {count} available")

# Example usage:
library = Library()
library.add_book("Python Programming")
library.add_book("Python Programming")
library.add_book("AI Basics")
library.display_books()
library.issue_book("Python Programming")
library.issue_book("Data Science")
library.display_books()
```

```
PS C:\Users\SAHITHI\OneDrive\문서\Desktop\AIASSISTEDCODING> & C:/Users/SAHITHI/AppData/Local/Programs/Python/Python313/python.exe c:/Users/SAHITHI/OneDrive/문서/Desktop/AIASSISTEDCODING
/lab6.1.5.py
Book 'Python Programming' added. Total copies: 1
Book 'Python Programming' added. Total copies: 2
Book 'AI Basics' added. Total copies: 1
Books in the library:
- Python Programming: 2 available
- AI Basics: 1 available
Book 'Python Programming' issued. Remaining copies: 1
Book 'Data Science' is not available to issue.
Books in the library:
- Python Programming: 1 available
- AI Basics: 1 available
PS C:\Users\SAHITHI\OneDrive\문서\Desktop\AIASSISTEDCODING>
```