

School of Computer Science and Artificial Intelligence

Lab Assignment # 6.5

**Program** : B. Tech (CSE)  
**Specialization** : -  
**Course Title** : AI Assisted Coding  
**Course Code** : 23CS002PC304  
**Semester** II  
**Academic Session** : 2025-2026  
**Name of Student** : P.Eshwar  
**Enrollment No.** : 2403A51L26  
**Batch No.** 51  
**Date** : 06/02/26

Submission Starts here

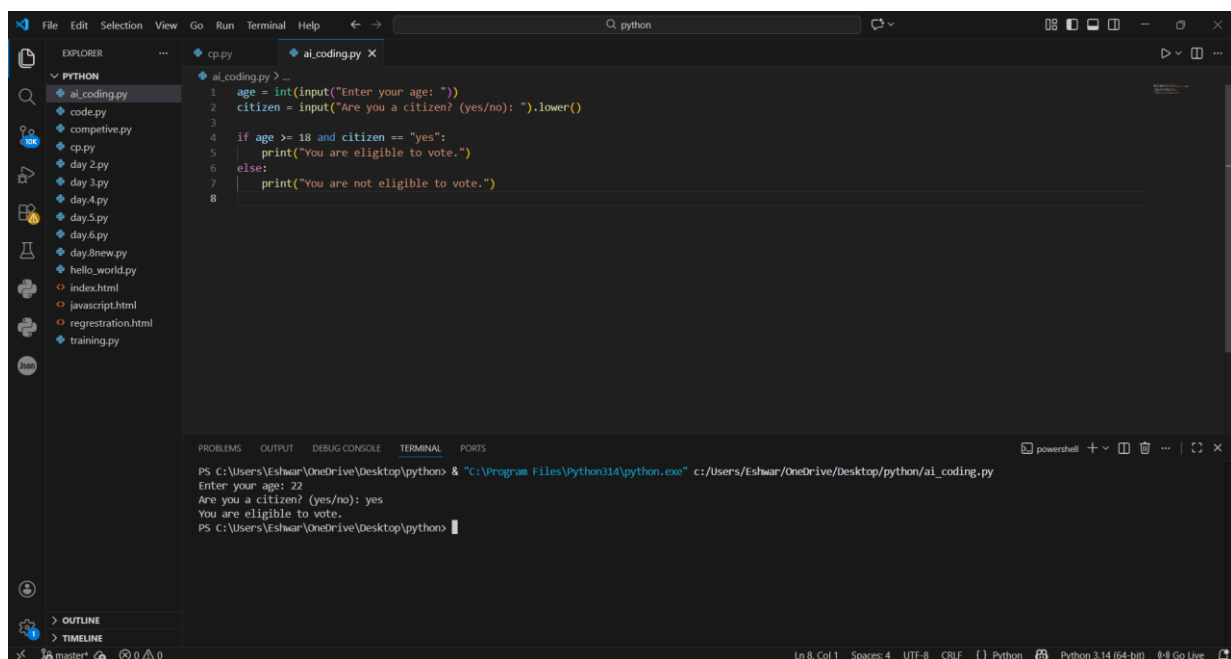
**Screenshots:**

**Task Description #1** (AI-Based Code Completion for Conditional Eligibility Check)

**Task:** Use an AI tool to generate eligibility logic.

**Prompt:**

“Generate Python code to check voting eligibility based on age and citizenship.”



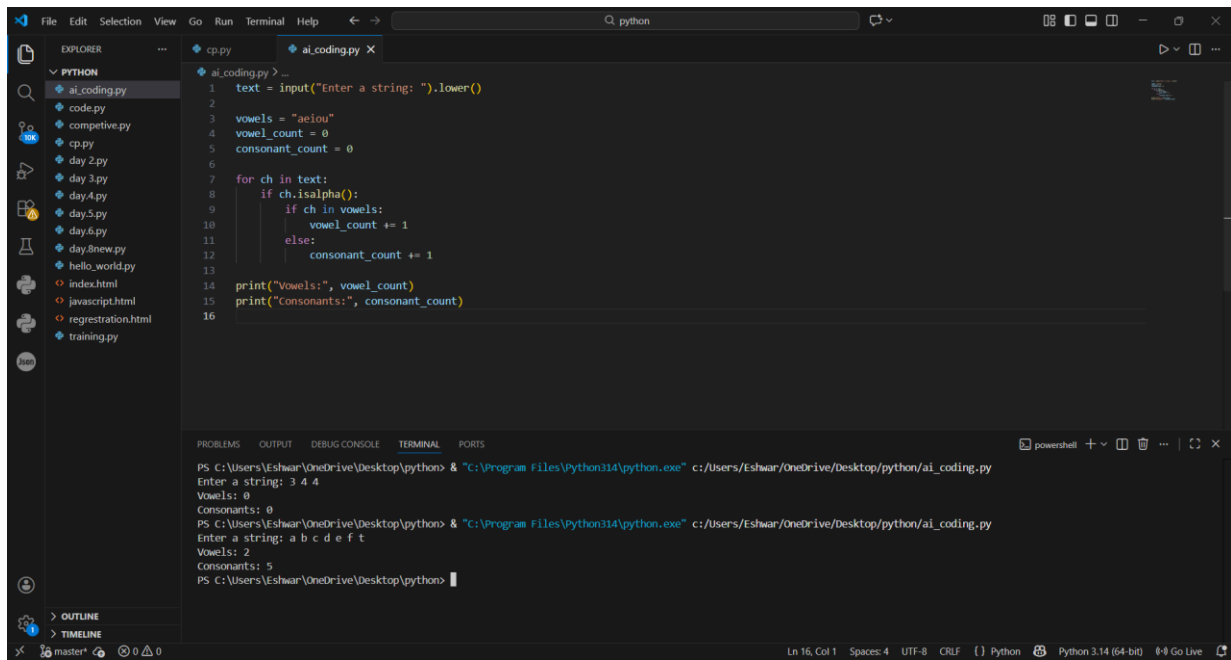
```
File Edit Selection View Go Run Terminal Help python
EXPLORER
PYTHON
  ai_coding.py
  code.py
  competitive.py
  cp.py
  day 2.py
  day 3.py
  day 4.py
  day 5.py
  day 6.py
  day 8new.py
  hello_world.py
  index.html
  javascript.html
  registration.html
  training.py
ai_coding.py
1 age = int(input("Enter your age: "))
2 citizen = input("Are you a citizen? (yes/no): ").lower()
3
4 if age >= 18 and citizen == "yes":
5     print("You are eligible to vote.")
6 else:
7     print("You are not eligible to vote.")
8
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\Eshwar\OneDrive\Desktop\python> "C:\Program Files\Python314\python.exe" c:/Users/Eshwar/OneDrive/Desktop/python/ai_coding.py
Enter your age: 22
Are you a citizen? (yes/no): yes
You are eligible to vote.
PS C:\Users\Eshwar\OneDrive\Desktop\python>
```

## Task Description #2(AI-Based Code Completion for Loop-Based String Processing)

**Task:** Use an AI tool to process strings using loops.

### Prompt:

“Generate Python code to count vowels and consonants in a string using a loop.”



```
1 text = input("Enter a string: ").lower()
2
3 vowels = "aeiou"
4 vowel_count = 0
5 consonant_count = 0
6
7 for ch in text:
8     if ch.isalpha():
9         if ch in vowels:
10             vowel_count += 1
11         else:
12             consonant_count += 1
13
14 print("Vowels:", vowel_count)
15 print("Consonants:", consonant_count)
16
```

Terminal Output:

```
PS C:\Users\Eshwar\OneDrive\Desktop\python> & "C:\Program Files\Python314\python.exe" c:/Users/Eshwar/OneDrive/Desktop/python/ai_coding.py
Enter a string: 3 4 4
Vowels: 0
Consonants: 0
PS C:\Users\Eshwar\OneDrive\Desktop\python> & "C:\Program Files\Python314\python.exe" c:/Users/Eshwar/OneDrive/Desktop/python/ai_coding.py
Enter a string: a b c d e f t
Vowels: 2
Consonants: 5
PS C:\Users\Eshwar\OneDrive\Desktop\python>
```

## Task Description #3 (AI-Assisted Code Completion Reflection Task)

**Task:** Use an AI tool to generate a complete program using classes, loops, and conditionals.

### Prompt:

“Generate a Python program for a library management system using classes, loops, and conditional statements.”

```

1 class Library:
2     def __init__(self):
3         self.books = []
4
5     def add_book(self, book_name):
6         self.books.append(book_name)
7         print(f"{book_name} added to the library.")
8
9     def remove_book(self, book_name):
10        if book_name in self.books:
11            self.books.remove(book_name)
12            print(f"{book_name} removed from the library.")
13        else:
14            print("Book not found.")
15
16    def display_books(self):
17        if self.books:
18            print("Available books:")
19            for book in self.books:
20                print("-", book)
21        else:
22            print("No books available.")
23
24
25 library = Library()
26
27 while True:
28     print("\nLibrary Menu")
29     print("1. Add Book")
30     print("2. Remove Book")
31     print("3. Display Books")
32     print("4. Exit")
33
34     choice = int(input("Enter your choice: "))
35
36     if choice == 1:
37         book = input("Enter book name: ")

```

## Output:

```

38     library.add_book(book)
39
40     elif choice == 2:
41         book = input("Enter book name to remove: ")
42         library.remove_book(book)
43
44     elif choice == 3:
45         library.display_books()
46
47     elif choice == 4:
48         print("Exiting Library System.")
49         break
50
51     else:
52         print("Invalid choice. Please try again.")
53

```

```

PS C:\Users\Eshwar\OneDrive\Desktop\python> & "C:\Program Files\Python314\python.exe" c:\Users\Eshwar\OneDrive\Desktop\python\ai_coding.py

Library Menu
1. Add Book
2. Remove Book
3. Display Books
4. Exit
Enter your choice: "C:\Program Files\Python314\python.exe" c:\Users\Eshwar\OneDrive\Desktop\python\ai_coding.py
Traceback (most recent call last):
  File "c:\Users\Eshwar\OneDrive\Desktop\python\ai_coding.py", line 34, in <module>
    choice = int(input("Enter your choice: "))
ValueError: invalid literal for int() with base 10: '"C:\Program Files\Python314\python.exe" c:\Users\Eshwar\OneDrive\Desktop\python\ai_coding.py'
PS C:\Users\Eshwar\OneDrive\Desktop\python>

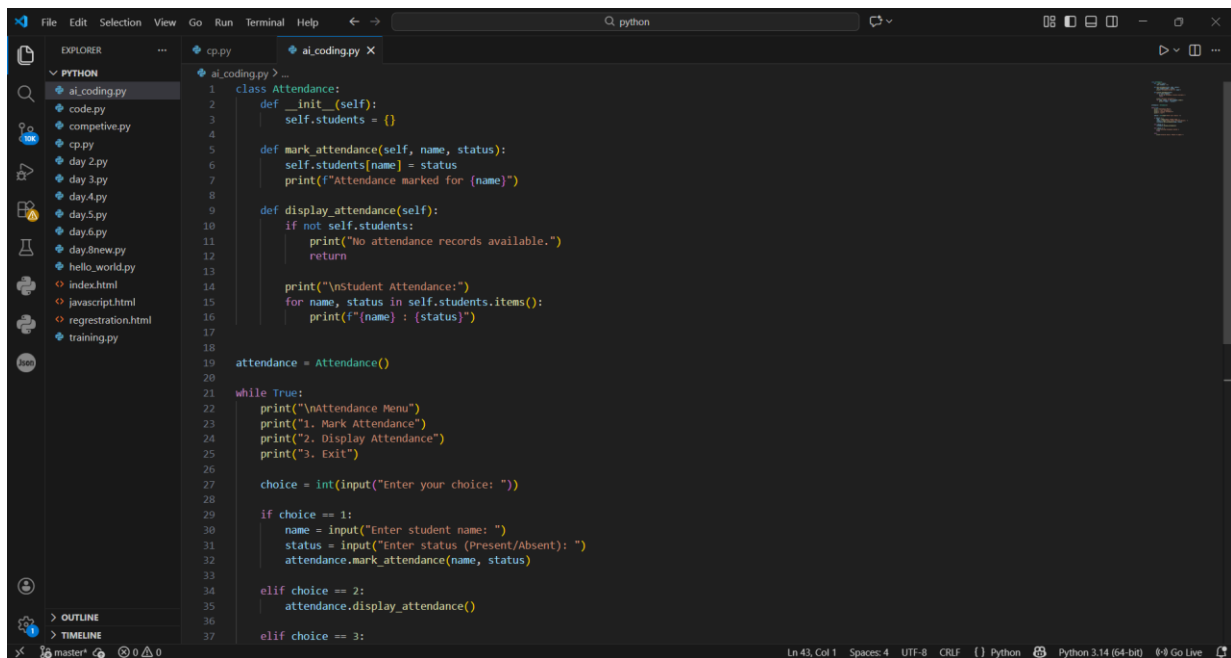
```

## Task Description #4 (AI-Assisted Code Completion for Class-Based Attendance System)

**Task:** Use an AI tool to generate an attendance management class.

**Prompt:**

“Generate a Python class to mark and display student attendance using loops.”

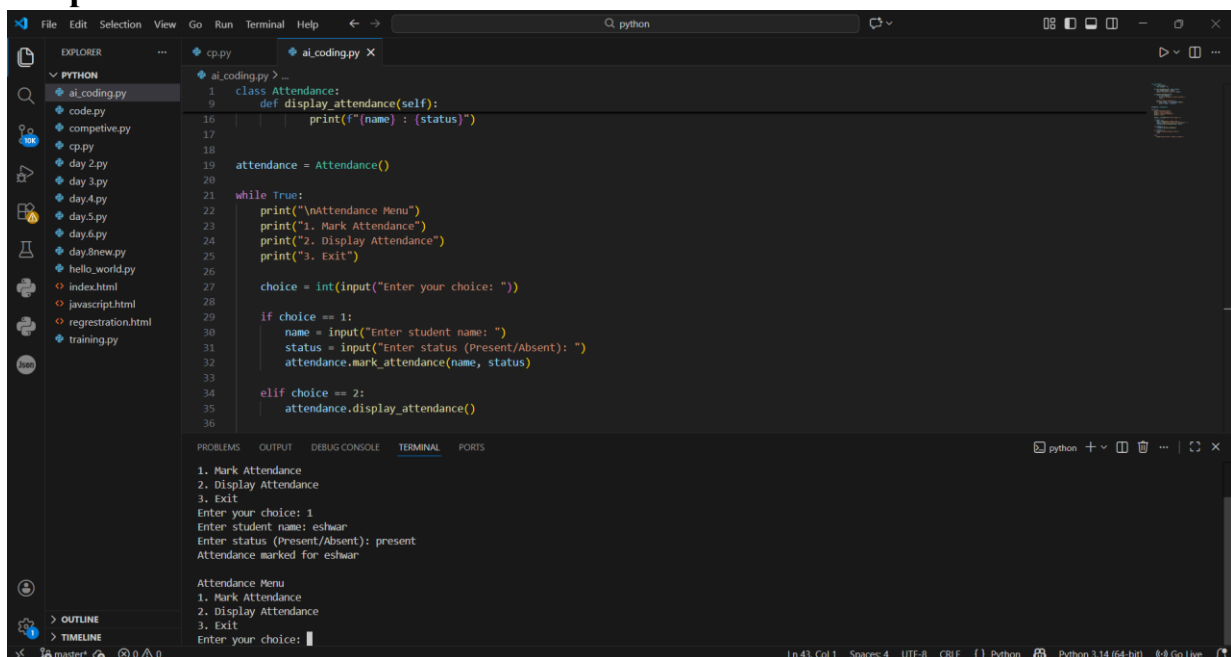


```

1 class Attendance:
2     def __init__(self):
3         self.students = {}
4
5     def mark_attendance(self, name, status):
6         self.students[name] = status
7         print(f"Attendance marked for {name}")
8
9     def display_attendance(self):
10        if not self.students:
11            print("No attendance records available.")
12            return
13
14        print("\nStudent Attendance:")
15        for name, status in self.students.items():
16            print(f"{name} : {status}")
17
18
19 attendance = Attendance()
20
21 while True:
22     print("\nAttendance Menu")
23     print("1. Mark Attendance")
24     print("2. Display Attendance")
25     print("3. Exit")
26
27     choice = int(input("Enter your choice: "))
28
29     if choice == 1:
30         name = input("Enter student name: ")
31         status = input("Enter status (Present/Absent): ")
32         attendance.mark_attendance(name, status)
33
34     elif choice == 2:
35         attendance.display_attendance()
36
37     elif choice == 3:

```

**Output:**



```

1. Mark Attendance
2. Display Attendance
3. Exit
Enter your choice: 1
Enter student name: eshwar
Enter status (Present/Absent): present
Attendance marked for eshwar

Attendance Menu
1. Mark Attendance
2. Display Attendance
3. Exit
Enter your choice:

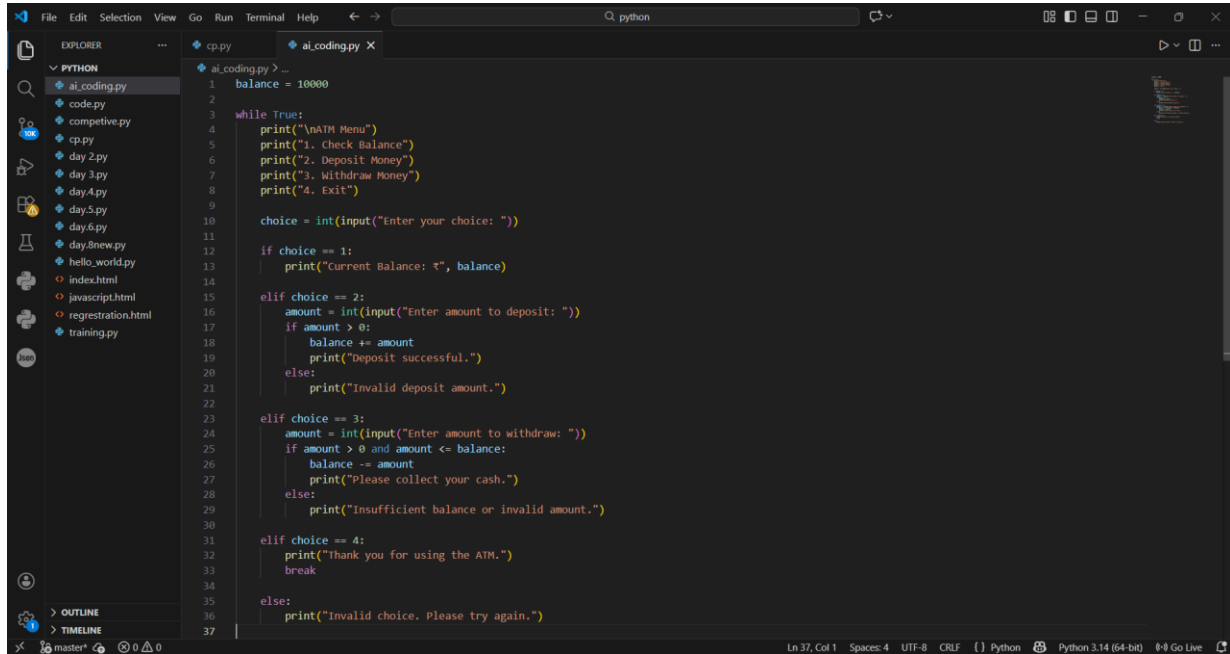
```

**Task Description #5** (AI-Based Code Completion for Conditional Menu Navigation)

**Task:** Use an AI tool to complete a navigation menu.

## Prompt:

“Generate a Python program using loops and conditionals to simulate an ATM menu.”

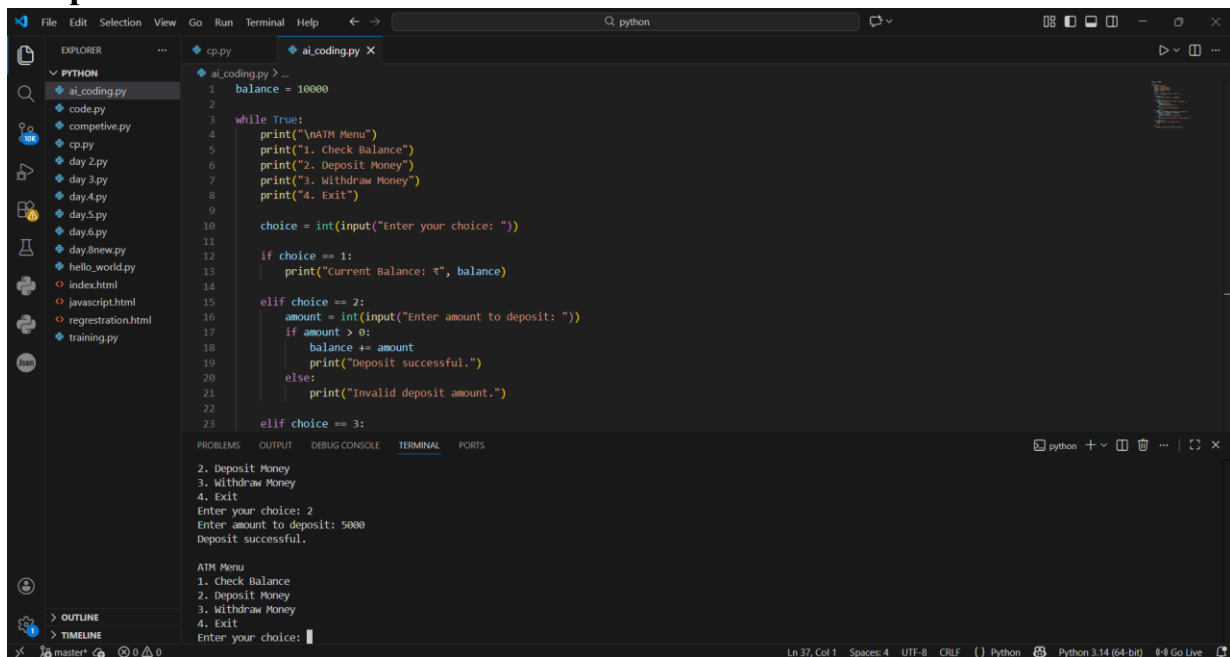


```

1  balance = 10000
2
3  while True:
4      print("\nATM Menu")
5      print("1. Check Balance")
6      print("2. Deposit Money")
7      print("3. Withdraw Money")
8      print("4. Exit")
9
10     choice = int(input("Enter your choice: "))
11
12     if choice == 1:
13         print("Current Balance: ₹", balance)
14
15     elif choice == 2:
16         amount = int(input("Enter amount to deposit: "))
17         if amount > 0:
18             balance += amount
19             print("Deposit successful.")
20         else:
21             print("Invalid deposit amount.")
22
23     elif choice == 3:
24         amount = int(input("Enter amount to withdraw: "))
25         if amount > 0 and amount <= balance:
26             balance -= amount
27             print("Please collect your cash.")
28         else:
29             print("Insufficient balance or invalid amount.")
30
31     elif choice == 4:
32         print("Thank you for using the ATM.")
33         break
34
35     else:
36         print("Invalid choice. Please try again.")
37

```

## Output:



```

2. Deposit Money
3. Withdraw Money
4. Exit
Enter your choice: 2
Enter amount to deposit: 5000
Deposit successful.

ATM Menu
1. Check Balance
2. Deposit Money
3. Withdraw Money
4. Exit
Enter your choice: █

```