

**K. R. MANGALAM
UNIVERSITY**

**Programming for Problem Solving Using
Python**

ASSIGNMENT 1

Assignment Title: Attendance Tracker

Student Name : Ishant

Roll No. : 2501940015

Program : MCA (AI & ML)

Semester : I

Session : 2025-26

Github :- https://github.com/Ishantaneja/Attandance_tracker

Faculty Name : Ms. Neha Kaushik

Date of Submission : 12/11/2025

Source Code

Name: Ishant

Date: 12/11/2025

Assignment: Attendance Tracker

```
import csv

from datetime import datetime

attendance = {}

def include_attendance():

    print("\n -----Insert the Entry -----")

    while True :

        students = input("Enter the name of the student :").strip()

        if students =="":

            print("Invalid name")

            continue

        elif students in attendance :

            print("Name is already recorded")

            continue


        time = input("Enter arrival time (HH:MM AM/PM) :").strip()

        if time.strip() == " ":

            print("INVALID Enter again")

            continue


        attendance[students]= time

        print(f"{students} Arrived at {time}")


    another = input("do you want to add another record of new student (y/n) :").strip().lower()
```

```
if another != "y":  
    break  
  
  
def record_attendance():  
    if len(attendance) == 0:  
        print("\n No records found ")  
        return  
  
  
    print("\n ===== ATTENDANCE =====\n")  
    print("Student Name\t\t Arrival Time")  
    print("-----")  
  
  
    for student, arrive in attendance.items():  
        print(f"{student}\t\t{arrive}")  
  
  
        print("-----")  
        print(f"Total Students Present: {len(attendance)}")  
  
  
def file_csv():  
    if len(attendance) == 0:  
        print("\n No records present.")  
        return  
  
  
    filename = "attendance_log.csv"  
    n = datetime.now().strftime("%d-%m-%Y %I:%M %p")  
  
  
    with open(filename, "w", newline="") as file:  
        writer = csv.writer(file)  
        writer.writerow([" Attendance "])
```

```
writer.writerow([f"Generated on: {n}"])

writer.writerow([])

writer.writerow(["Student Name", "Arrival Time"])

for student, time in attendance.items():

    writer.writerow([student, time])

writer.writerow([])

writer.writerow(["Total Students Present", len(attendance)])


print(f"\n Attendance has been saved to '{filename}'")

def absent_student():

    if len(attendance) == 0:

        print("\nThe record is empty")

        return

    try:

        total = int(input("\nEnter total number of students in class: "))

        absent = total - len(attendance)

        print(f"Total Present: {len(attendance)}")

        print(f"Total Absent: {absent}")

    except:

        print("Invalid number. Try again.")

def menu_view():

    while True:

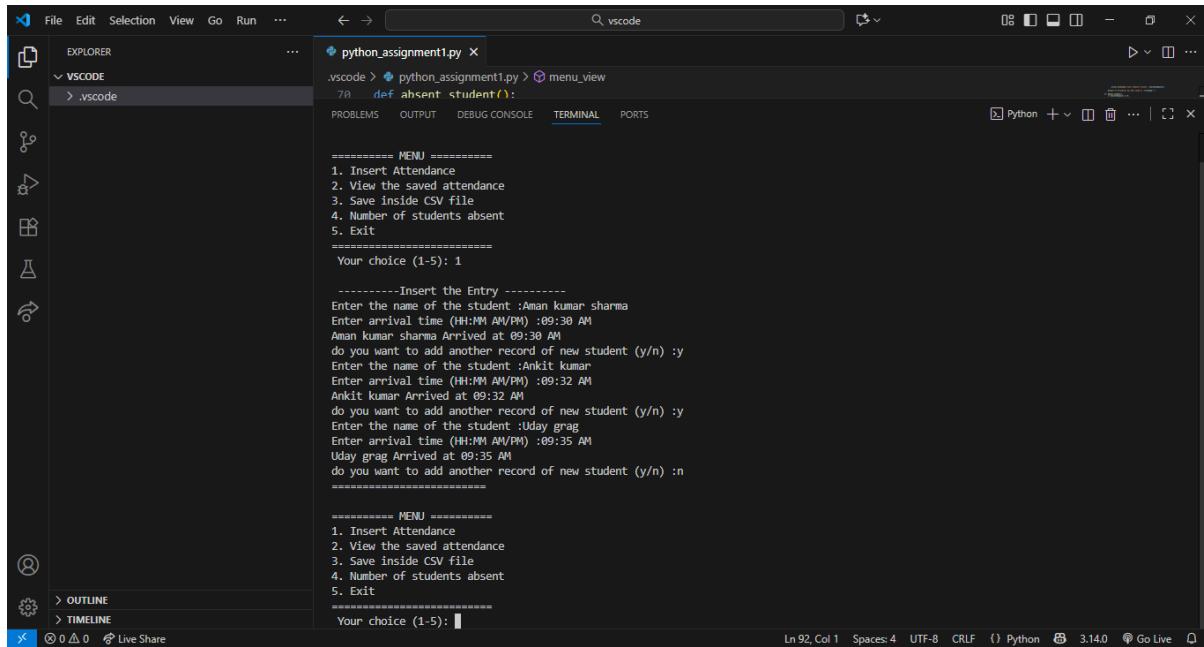
        print("=====")

        print("\n===== MENU =====")

        print("1. Insert Attendance")
```

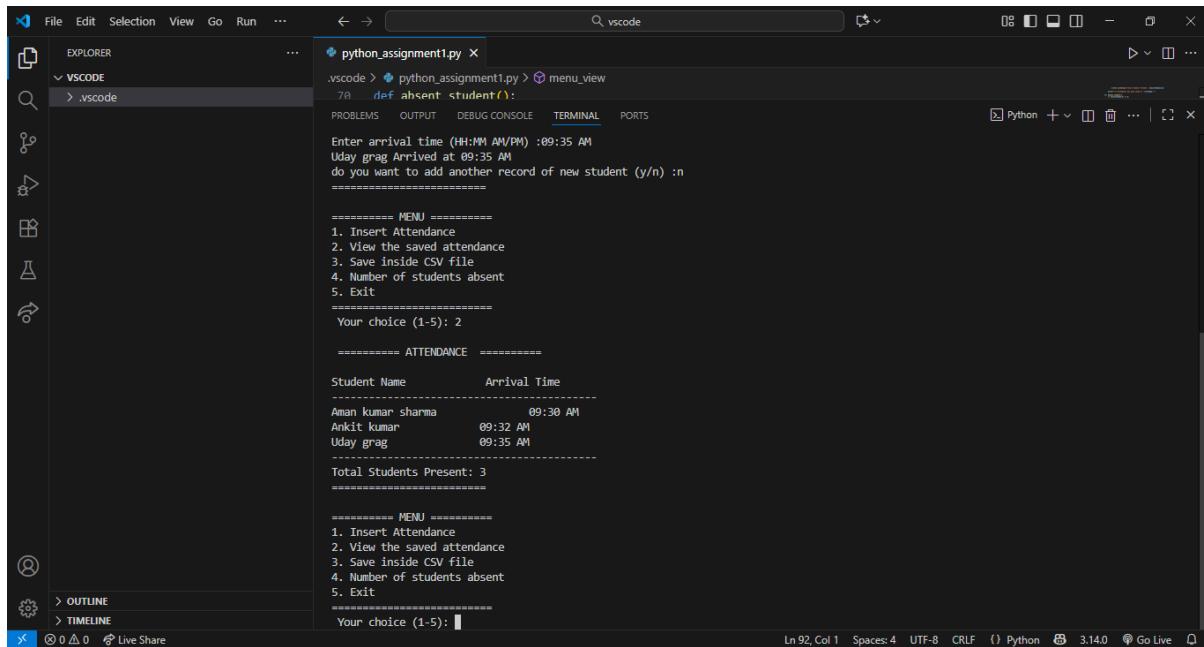
```
print("2. View the saved attendance")
print("3. Save inside CSV file")
print("4. Number of students absent")
print("5. Exit")
print("=====")  
  
choice = input(" Your choice (1-5): ")
if choice == "1":
    include_attendance()
elif choice == "2":
    record_attendance()
elif choice == "3":
    file_csv()
elif choice == "4":
    absent_student()
elif choice == "5":
    print("\nThank you for using Attendance Tracker")
    break
else:
    print("Invalid choice. Try again.")  
  
menu_view()
```

Output-1



```
python_assignment1.py
vscode > python_assignment1.py > menu_view
78 def absent_student():
    ===== MENU =====
    1. Insert Attendance
    2. View the saved attendance
    3. Save inside CSV file
    4. Number of students absent
    5. Exit
    =====
    Your choice (1-5): 1
    ===== Insert the Entry =====
    Enter the name of the student :Aman kumar sharma
    Enter arrival time (HH:MM AM/PM) :09:30 AM
    Aman kumar sharma Arrived at 09:30 AM
    do you want to add another record of new student (y/n) :y
    Enter the name of the student :Ankit kumar
    Enter arrival time (HH:MM AM/PM) :09:32 AM
    Ankit Kumar Arrived at 09:32 AM
    do you want to add another record of new student (y/n) :y
    Enter the name of the student :Uday grag
    Enter arrival time (HH:MM AM/PM) :09:35 AM
    Uday grag Arrived at 09:35 AM
    do you want to add another record of new student (y/n) :n
    ===== MENU =====
    1. Insert Attendance
    2. View the saved attendance
    3. Save inside CSV file
    4. Number of students absent
    5. Exit
    =====
    Your choice (1-5):
```

Output-2



```
python_assignment1.py
vscode > python_assignment1.py > menu_view
78 def absent_student():
    Enter arrival time (HH:MM AM/PM) :09:35 AM
    Uday grag Arrived at 09:35 AM
    do you want to add another record of new student (y/n) :n
    ===== MENU =====
    1. Insert Attendance
    2. View the saved attendance
    3. Save inside CSV file
    4. Number of students absent
    5. Exit
    =====
    Your choice (1-5): 2
    ===== ATTENDANCE =====
    Student Name          Arrival Time
    -----
    Aman kumar sharma    09:30 AM
    Ankit kumar          09:32 AM
    Uday grag            09:35 AM
    -----
    Total Students Present: 3
    ===== MENU =====
    1. Insert Attendance
    2. View the saved attendance
    3. Save inside CSV file
    4. Number of students absent
    5. Exit
    =====
    Your choice (1-5):
```

Output-3

The screenshot shows a Microsoft Visual Studio Code (VS Code) interface running on a Windows operating system. The title bar displays 'vscode'. The left sidebar includes icons for Explorer, Search, Problems, and Terminal, along with sections for VS Code, Outline, and Timeline. The main area is the Terminal tab, which contains the following text:

```
python_assignment1.py
.
.
.
def absent_student():
    PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
    Python ... x

1. Insert Attendance
2. View the saved attendance
3. Save inside CSV file
4. Number of students absent
5. Exit
=====
Your choice (1-5): 3

Attendance has been saved to 'attendance_report.csv'
=====

===== MENU =====
1. Insert Attendance
2. View the saved attendance
3. Save inside CSV file
4. Number of students absent
5. Exit
=====
Your choice (1-5): 4

Enter total number of students in class: 20
Total Present: 3
Total Absent: 17
=====

===== MENU =====
1. Insert Attendance
2. View the saved attendance
3. Save inside CSV file
4. Number of students absent
5. Exit
=====
Your choice (1-5): 1
```

The status bar at the bottom right shows 'Ln 92, Col 1' and other system information.