

K. R. MANGALAM UNIVERSITY



ASSIGNMENT 1

**Course Name: Programming for Problem Solving Using
Python**

Assignment Title: Attendance Tracker

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Program: MCA (AI & ML)

Semester: I

Session: 2025-26

Faculty Name: Ms. Neha Kaushik

Date of Submission: 12/11/2025

Department: SOET	Session: 2025-26
Program: MCA (AI/ML)	Semester: 1
Course Code: ETCCPP171	College Rollno: 2501940055
Course Name: Programming for Problem Solving Using Python	
Submitted by: Tushar Singh	Faculty: Ms. Neha Kaushik

GitHub Link :- <https://github.com/singhtushar738-prog/Student-Attendance-Tracker.git>

Name: Tushar Singh

Date: 12/11/2025

Assignment: Attendance Tracker

```
01 import csv
02 from datetime import datetime
03 attendance = {}
04 def include_attendance():
05     print("\n -----Insert the Entry -----")
06     while True :
07         students = input("Enter name of the student :").strip()
08         if students == "":
09             print("Invalid name")
10             continue
11         elif students in attendance :
12             print("Name is already recorded")
13             continue
14
15         time = input("Enter arrival time (HH:MM AM/PM) :").strip()
16         if time.strip() == " ":
17             print("INVALID Enter again")
18             continue
19
20         attendance[students]= time
21         print(f"{students} Arrived at {time}")
22
23         another = input("do you want to add another record of new
24 student (y/n) :").strip().lower()
25         if another != "y":
26             break
27
28 def record_attendance():
29     if len(attendance) == 0:
30         print("\n No records found ")
```

```

31         return
32
33     print("\n ===== ATTENDANCE =====\n ")
34     print("Student Name\t\t Arrival Time")
35     print("-----")
36
37     for student, arrive in attendance.items():
38         print(f"{student}\t\t{arrive}")
39
40     print("-----")
41     print(f"Total Students Present: {len(attendance)}")
42
43 def file_csv():
44     if len(attendance) == 0:
45         print("\n No records present.")
46         return
47
48     filename = "attendance_log.csv"
49     n = datetime.now().strftime("%d-%m-%Y %I:%M %p")
50
51     with open(filename, "w", newline="") as file:
52         writer = csv.writer(file)
53         writer.writerow([" Attendance "])
54         writer.writerow([f"Generated on: {n}"])
55         writer.writerow([])
56         writer.writerow(["Student Name", "Arrival Time"])
57
58         for student, time in attendance.items():
59             writer.writerow([student, time])
60
61         writer.writerow([])
62         writer.writerow(["Total Students Present", len(attendance)])
63
64     print(f"\n Attendance has been saved to '{filename}'")
65
66 def absent_student():
67     if len(attendance) == 0:
68         print("\nThe record is empty")
69         return
70     try:
71         total = int(input("\n Enter total number of students in class:
72 "))
73         absent = total - len(attendance)
74         print(f"Total Present: {len(attendance)}")
75         print(f"Total Absent: {absent}")
76     except:
77         print("Invalid number. Try again.")
78
79 def menu_view():
80     while True:
81         print("=====")
82         print("\n===== MENU =====")
83         print("1. Insert Attendance")
84         print("2. View the saved attendance")
85         print("3. Save inside CSV file")
86         print("4. Number of students absent")

```

```

87         print("5. Exit")
88         print("=====")
89
90         choice = input(" Your choice (1-5): ")
91         if choice == "1":
92             include_attendance()
93         elif choice == "2":
94             record_attendance()
95         elif choice == "3":
96             file_csv()
97         elif choice == "4":
98             absent_student()
99         elif choice == "5":
100            print("\nThank you for using Attendance Tracker")
101            break
102         else:
103            print("Invalid choice. Try again.")
104
105     menu_view()

```

OUTPUT

```

PS C:\Users\tushar singh> & "C:/Users/tushar singh/AppData/Local/Programs/Python/Python313/python.exe" "d:/project python/attendance_tracker/attendance_tracker/Tracker.py"
=====
===== 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 name of the student :shubham
Enter arrival time (HH:MM AM/PM) :09:50 AM
shubham Arrived at 09:50 AM
do you want to add another record of new student (y/n) :y
Enter name of the student :hash
Enter arrival time (HH:MM AM/PM) :09:51 AM
hash Arrived at 09:51 AM
do you want to add another record of new student (y/n) :y
Enter name of the student :vinayak
Enter arrival time (HH:MM AM/PM) :09:52 AM
vinayak Arrived at 09:52 AM
do you want to add another record of new student (y/n) :y
Enter name of the student :nitin
Enter arrival time (HH:MM AM/PM) :09:50 AM
nitin Arrived at 09:50 AM
do you want to add another record of new student (y/n) :y
Enter name of the student :ram
Enter arrival time (HH:MM AM/PM) :09:51 AM
ram Arrived at 09:51 AM
do you want to add another record of new student (y/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
--------------	--------------

shubham	09:50 AM
---------	----------

hash	09:51 AM
------	----------

vinayak	09:52 AM
---------	----------

nitin	09:50 AM
-------	----------

ram	09:51 AM
-----	----------

Total Students Present: 5

=====

===== 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): 3

Attendance has been saved to 'attendance_log.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: 10
Total Present: 5
Total Absent: 5
=====

===== MENU =====
1. Insert Attendance
Enter total number of students in class: 10
Total Present: 5
Total Absent: 5
=====

===== MENU =====
Enter total number of students in class: 10
Total Present: 5
Total Absent: 5
=====

Enter total number of students in class: 10
Total Present: 5
Total Absent: 5
=====

Enter total number of students in class: 10
Total Present: 5
Total Absent: 5
=====
```