

Python Assignment - 1

School of Engineering & Technology

Department: SOET	Session: 2025-26
Program: MCA (AI & ML)	Semester: 1
Course Code: ETCCPP171	College Roll no: 2501940074
Course Name: Programming for Problem Solving Using Python	
Submitted by: Khushi	Faculty: Ms. Neha Kaushik

Input:-

''' Name: Khushi

Date: 10-Nov-2025

Assignment Title: Attendance Tracker - Python assignment 01

Course: Programming for Problem Solving Using Python(ETCCPP171)'''

```
from datetime import datetime
```

```
print("\nWelcome to the Command-Line Attendance Tracker!")
```

```
print("This tool helps record student attendance efficiently.\n")
```

```
attendance = {}
```

```
num_entries_input = input("Enter number of students to record: ")
```

```
if num_entries_input.isdigit():
```

```
    num_entries = int(num_entries_input)
```

```
    if num_entries > 0:
```

```
        count = 1
```

```

while count <= num_entries:

    print(f"\n--- Entry {count} ---")

    name = input("Enter student name: ").strip()

    if name == "":

        print("Name cannot be empty. Please try again.")

        continue

    elif name in attendance:

        print("Duplicate entry! This student is already recorded.")

        continue

    else:

        time = input("Enter check-in time: ").strip()

        if time == "":

            print("Timestamp missing. Please try again.")

            continue

        else:

            attendance[name] = time

            print("Entry recorded successfully.")

            count += 1

    else:

        print("Number of entries must be greater than zero.")

else:

    print("Invalid input! Please enter a valid number for entries.")


print("\nAttendance Summary".center(45, "-"))
print(f"{'Student Name':20s}\t{'Check-in Time'}")
print("-" * 45)


if len(attendance) > 0:

```

```

    for name, time in attendance.items():
        print(f"{name:20s}\t{time}")
    else:
        print("No attendance records found.")

print("-" * 45)
print(f"Total Students Present: {len(attendance)}")

save_choice = input("\nDo you want to save this attendance record? (yes/no): ").lower()

if save_choice == "yes":
    if len(attendance) > 0:
        with open("attendance_log.txt", "w") as file:
            file.write("Attendance Report\n")
            file.write(f"Generated on: {datetime.now().strftime('%d-%m-%Y %H:%M:%S')}\n\n")
            file.write(f"{'Student Name':20s}\t{'Check-in Time'}\n")
            file.write("-" * 45 + "\n")
            for name, time in attendance.items():
                file.write(f"{name:20s}\t{time}\n")
            file.write("-" * 45 + "\n")
            file.write(f"Total Present: {len(attendance)}\n")
            print("Attendance successfully saved to 'attendance_log.txt'!")
    else:
        print("No data to save.")
else:
    print("Data not saved.")

print("\nThank you for using the Attendance Tracker!\n")

```

OUTPUT:

```

File Edit Selection View Run Terminal Help
Q Attendance_Tracker

C:\Users\Anshu> g++ Attendance_Tracker.cpp -std=c++11 -o Attendance_Tracker.exe
Attendance_Tracker.exe
Welcome to the Command Line Attendance Tracker!
This tool lists every student attendance efficiently.

Enter number of students to record: 5

--- Entry 1 ---
Enter student name: Rishi Rishi
Enter date to Date: 01-01-2024
Entry recorded successfully.

--- Entry 2 ---
Enter student name: Anshu Anshu
Enter date to Date: 01-01-2024
Entry recorded successfully.

--- Entry 3 ---
Enter student name: Anshu Anshu
Enter date to Date: 01-01-2024
Entry recorded successfully.

--- Entry 4 ---
Enter student name: Anshu Anshu
Enter date to Date: 01-01-2024
Entry recorded successfully.

--- Entry 5 ---
Enter student name: Anshu Anshu
Enter date to Date: 01-01-2024
Entry recorded successfully.

Attendance Summary:
Student Name Date Time
-----
Rishi Rishi 01-01-2024 09:00 am
Anshu Anshu 01-01-2024 09:00 am
Anshu Anshu 01-01-2024 09:00 am
Anshu Anshu 01-01-2024 09:00 am
Anshu Anshu 01-01-2024 09:00 am

Total Students Present: 5

Do you want to view this attendance record? (y/n): y
View Record:
-----
Student Name Date Time
-----
Rishi Rishi 01-01-2024 09:00 am
Anshu Anshu 01-01-2024 09:00 am
Anshu Anshu 01-01-2024 09:00 am
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Total Students Present: 5

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Attendance_Tracker.exe
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```