

Attendance Management System

Problem Statement

You are tasked with building an Attendance Management System where:

- The organization can have multiple **departments**.
- Each **department** can have multiple **employees**.
- The system supports tracking and modifying the **number of days an employee has attended**.

Your system should allow:

1. **Adding departments**.
2. **Adding employees to departments**.
3. **Displaying employee attendance for each department**.
4. **Marking attendance (increasing days present)**.
5. **Correcting attendance (decreasing days present)**.

Functionality

Initial I/O

- The program should read the **number of departments** as a **command-line argument**.
- For each department:
 - Assign a **unique department ID** (starting from 1).
 - Ask the user how many employees to register in this department.
 - For each employee, get the following inputs:
 - * **Employee ID** (integer)
 - * **Name** (string)
 - * **Days Present** (integer, initial value)

User Menu (Loop)

The program should then repeatedly show a menu to the user:

Menu:

1. Mark Attendance (Increase Days)
2. Correct Attendance (Decrease Days)
3. Display All Department Info
4. Exit

Option 1: Mark Attendance

- Prompt the user to enter **Department ID** and **Employee ID**.
- Increase the employee's **Days Present** by 1.
- Display a confirmation message.

Option 2: Correct Attendance

- Prompt the user to enter **Department ID** and **Employee ID**.
- If the employee has at least 1 day recorded, decrease **Days Present** by 1.
- If days present is already zero, inform the user.

Option 3: Display All Department Info

- Display the details of all departments and their employees:
 - For each department, print its **Department ID**.
 - List all employees with their details: **Employee ID**, **Name**, **Days Present**.
 - If a department has no employees, print:
No employees registered.

Option 4: Exit

- End the menu loop and terminate the program.

Constraints

- The system should limit:
 - A **maximum of 10 departments**.
 - A **maximum of 50 employees per department**.
- If these limits are exceeded, show an appropriate message.

Classes to Implement

You must implement **only** the following classes:

1. **Employee**
Represents an employee with ID, name, and attendance.
2. **Department**
Represents a department containing employees.
3. **Main**
Contains the **main** method and handles user input/output. The **Main** class should **not store any data**.

Submission Guidelines

- Create a folder named by your ID.
- Move all `.java` files into the folder.
- Zip the folder and submit the zip file.