

Problem 1: Employee Management System

Problem Statement:

You are tasked with developing a basic employee management system for a small company. The system should be able to store employee details, search for an employee by ID, and sort employees based on their salaries. You need to implement the following functionalities:

1. **Search Employee:** Search for an employee by their ID using linear search.
2. **Sort Employees by Salary:** Sort the list of employees based on their salaries using insertion sort.

Instructions:

1. Create a class `Employee` with attributes `id`, `name`, and `salary`.
2. Implement the `search_employee` function to find an employee by their ID using linear search.
3. Implement the `sort_employees_by_salary` function to sort employees by salary using insertion sort.
4. Ensure the `main` function demonstrates all functionalities.

Submission Guidelines:

- Submit your code in a single cpp file named `employee_management.cpp`.
- The file should contain the `Employee` class, and all required functions.
- Ensure your main function includes:
 - Adding at least 5 employees.
 - Searching for an employee with a specific ID.
 - Sorting the list of employees by salary.
- The output should display:
 - The list of employees before and after sorting by salary.
 - The result of the search function.

Output Format

Employee List before Sorting:

ID: 1, Name: John Doe, Salary: 50000

ID: 2, Name: Jane Smith, Salary: 60000

...

Employee List after Sorting by Salary:

ID: 3, Name: Alice Johnson, Salary: 45000

ID: 1, Name: John Doe, Salary: 50000

...

Search Result:

ID: 2, Name: Jane Smith, Salary: 60000