**Employee Management System**

**Employee.java**

public class Employee {

    private int employeeId;

    private String name;

    private String position;

    private double salary;

    public Employee(int employeeId, String name, String position, double salary) {

        this.employeeId = employeeId;

        this.name = name;

        this.position = position;

        this.salary = salary;

    }

    public int getEmployeeId() {

        return employeeId;

    }

    public String getName() {

        return name;

    }

    public String getPosition() {

        return position;

    }

    public double getSalary() {

        return salary;

    }

    @Override

    public String toString() {

        return "Employee{" +

                "ID=" + employeeId +

                ", Name='" + name + '\'' +

                ", Position='" + position + '\'' +

                ", Salary=" + salary +

                '}';

    }

}

**EmployeeManager.java**

public class EmployeeManager {

    private Employee[] employees;

    private int size; // tracks current number of employees

    public EmployeeManager(int capacity) {

        employees = new Employee[capacity];

        size = 0;

    }

    // Add employee

    public void addEmployee(Employee emp) {

        if (size < employees.length) {

            employees[size++] = emp;

            System.out.println("Employee added: " + emp.getEmployeeId());

        } else {

            System.out.println("Array full. Cannot add more employees.");

        }

    }

    // Search employee by ID

    public Employee searchEmployee(int id) {

        for (int i = 0; i < size; i++) {

            if (employees[i].getEmployeeId() == id) {

                return employees[i];

            }

        }

        return null;

    }

    // Traverse all employees

    public void listEmployees() {

        for (int i = 0; i < size; i++) {

            System.out.println(employees[i]);

        }

    }

    // Delete employee by ID

    public boolean deleteEmployee(int id) {

        for (int i = 0; i < size; i++) {

            if (employees[i].getEmployeeId() == id) {

                // Shift elements left

                for (int j = i; j < size - 1; j++) {

                    employees[j] = employees[j + 1];

                }

                employees[--size] = null; // Remove duplicate and decrease size

                System.out.println("Employee deleted: " + id);

                return true;

            }

        }

        return false;

    }

}

**Main.java**

public class Main {

    public static void main(String[] args) {

        EmployeeManager manager = new EmployeeManager(5); // max 5 employees

        Employee e1 = new Employee(101, "Alice", "Developer", 75000);

        Employee e2 = new Employee(102, "Bob", "Manager", 90000);

        Employee e3 = new Employee(103, "Charlie", "Analyst", 60000);

        manager.addEmployee(e1);

        manager.addEmployee(e2);

        manager.addEmployee(e3);

        System.out.println("\nAll Employees:");

        manager.listEmployees();

        System.out.println("\nSearch Employee with ID 102:");

        Employee found = manager.searchEmployee(102);

        System.out.println(found != null ? found : "Not found");

        System.out.println("\nDeleting Employee with ID 101...");

        manager.deleteEmployee(101);

        System.out.println("\nUpdated Employee List:");

        manager.listEmployees();

    }

}

