**Exercise 4: Employee Management System**

**Program:**

package Algorithms\_DataStructures.Employee;

class Employee {

    public int employeeId;

    public String employeeName;

    public String position;

    public double salary;

    Employee(int id, String name, String position, double salary) {

        this.employeeId = id;

        this.employeeName = name.toLowerCase();

        this.position = position.toLowerCase();

        this.salary = salary;

    }

    public String toString() {

        return employeeId + " - " + employeeName + " - " + position + " - " + salary;

    }

}

class Operations {

    Employee[] employees = new Employee[2];

    int count = 0;

    void add(Employee e) {

        if (count == employees.length) {

            Employee[] newArr = new Employee[employees.length \* 2];

            for (int i = 0; i < employees.length; i++) {

                newArr[i] = employees[i];

            }

            employees = newArr;

        }

        employees[count++] = e;

    }

    void search(int id) {

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

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

                System.out.println("Found: " + employees[i]);

                return;

            }

        }

        System.out.println("Employee not found");

    }

    void traverse() {

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

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

        }

    }

    void delete(int id) {

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

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

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

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

                }

                employees[--count] = null;

                System.out.println("Employee deleted");

                return;

            }

        }

        System.out.println("Employee not found to delete");

    }

}

public class Main {

    public static void main(String[] args) {

        Operations op = new Operations();

        op.add(new Employee(1, "Alice", "Manager", 80000));

        op.add(new Employee(2, "Bob", "Developer", 60000));

        op.add(new Employee(3, "Charlie", "Tester", 40000));

        op.traverse();

        op.search(2);

        op.delete(1);

        op.traverse();

    }

}

A screen shot of a computer

AI-generated content may be incorrect.