**Exercise 4: Employee Management System**

**Employee.java**

public class Employee {

private String employeeId;

private String name;

private String position;

private double salary;

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

this.employeeId = employeeId;

this.name = name;

this.position = position;

this.salary = salary;

}

public String getEmployeeId() {

return employeeId;

}

public void display() {

System.***out***.println("ID: " + employeeId + ", Name: " + name +

", Position: " + position + ", Salary: ₹" + salary);

}

}

**EmployeeManagementSystem.java**

public class EmployeeManagementSystem {

private Employee[] employees;

private int count;

public EmployeeManagementSystem(int size) {

employees = new Employee[size];

count = 0;

}

public void addEmployee(Employee emp) {

if (count < employees.length) {

employees[count++] = emp;

System.***out***.println("Employee added.");

} else {

System.***out***.println("Employee list is full.");

}

}

public void searchEmployee(String empId) {

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

if (employees[i].getEmployeeId().equals(empId)) {

System.***out***.println("Employee found:");

employees[i].display();

return;

}

}

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

}

public void traverseEmployees() {

if (count == 0) {

System.***out***.println("No employees to display.");

} else {

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

employees[i].display();

}

}

}

public void deleteEmployee(String empId) {

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

if (employees[i].getEmployeeId().equals(empId)) {

// Shift elements to fill the gap

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.");

}

}

**Main.java**

public class Main {

public static void main(String[] args) {

EmployeeManagementSystem system = new EmployeeManagementSystem(5);

Employee e1 = new Employee("E001", "Allen Ambrose", "Manager", 60000);

Employee e2 = new Employee("E002", "Babu", "Developer", 45000);

Employee e3 = new Employee("E003", "Chamini", "Analyst", 40000);

system.addEmployee(e1);

system.addEmployee(e2);

system.addEmployee(e3);

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

system.traverseEmployees();

System.***out***.println("\nSearching for E002:");

system.searchEmployee("E002");

System.***out***.println("\nDeleting E001:");

system.deleteEmployee("E002");

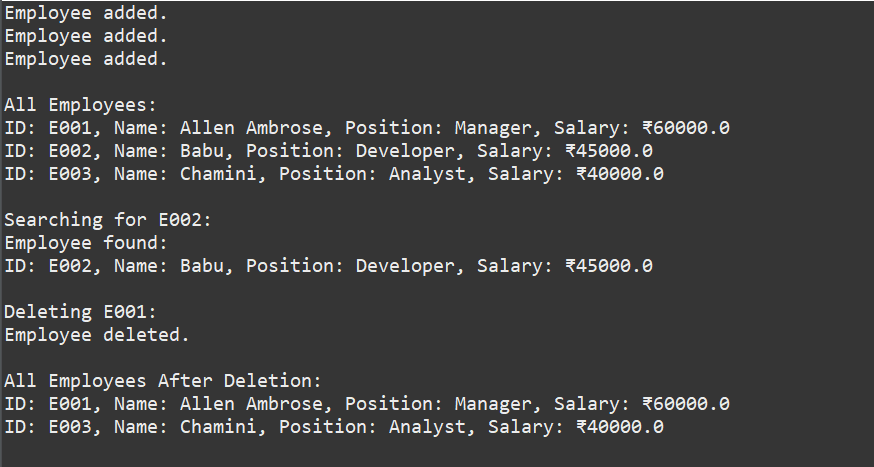
System.***out***.println("\nAll Employees After Deletion:");

system.traverseEmployees();

}

}

**Output:**

****