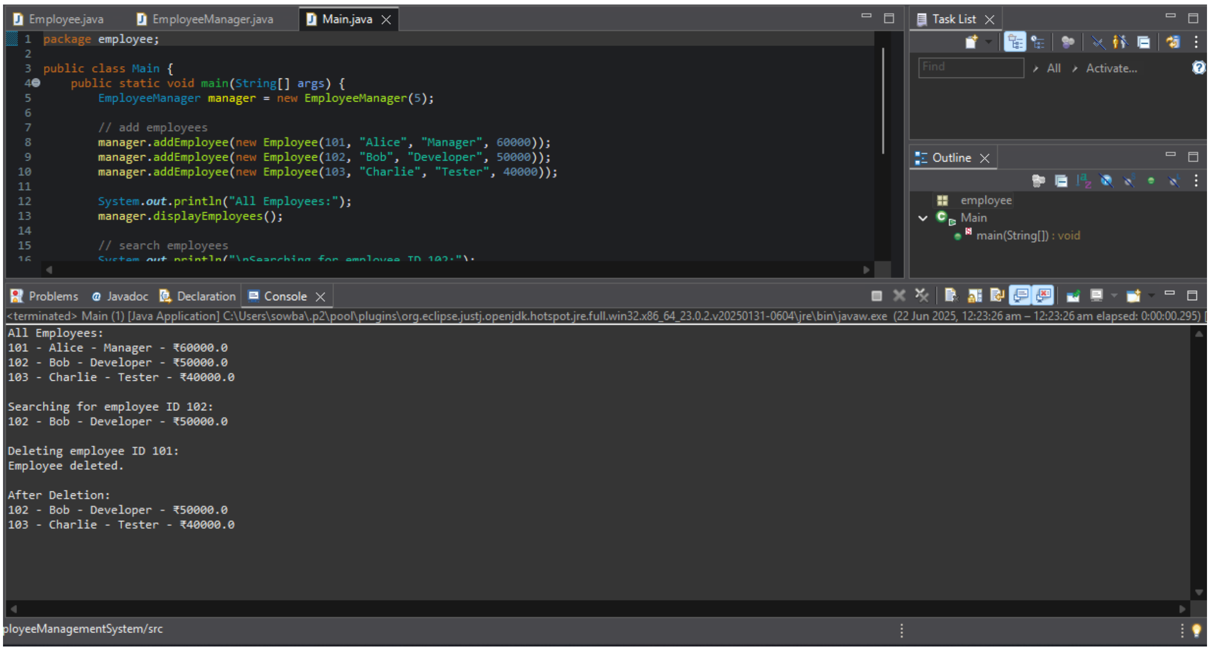
Exercise 4: Employee Management System

OUTPUT:



```java
package employee;

public class Main {
    public static void main(String[] args) {
        EmployeeManager manager = new EmployeeManager(5);

        // add employees
        manager.addEmployee(new Employee(101, "Alice", "Manager", 60000));
        manager.addEmployee(new Employee(102, "Bob", "Developer", 50000));
        manager.addEmployee(new Employee(103, "Charlie", "Tester", 40000));

        System.out.println("All Employees:");
        manager.displayEmployees();

        // search employees
        System.out.println("\nSearching for employee ID 102:");
```

```
<terminated> Main (1) [Java Application] C:\Users\sowba\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_23.0.2.v20250131-0604\jre\bin\javaw.exe  (22 Jun 2025, 12:23:26 am – 12:23:26 am elapsed: 0:00:00.295)
All Employees:
101 - Alice - Manager - ₹60000.0
102 - Bob - Developer - ₹50000.0
103 - Charlie - Tester - ₹40000.0

Searching for employee ID 102:
102 - Bob - Developer - ₹50000.0

Deleting employee ID 101:
Employee deleted.

After Deletion:
102 - Bob - Developer - ₹50000.0
103 - Charlie - Tester - ₹40000.0
```

In the Employee Management System, arrays provide a simple way to store and manage records with fast traversal. However, operations like adding or deleting can be inefficient due to fixed size and shifting elements. For dynamic data, more flexible structures like ArrayList or HashMap are better suited.