

Practical No. 1(A)

Program :

```
import java.util.*;

class Employee implements Comparable<Employee> {
    private String name;
    private double salary;
    public Employee(String name, double salary) {
        this.name = name;
        this.salary = salary;
    }
    public String getName() {
        return name;
    }
    public double getSalary() {
        return salary;
    }
    @Override
    public int compareTo(Employee other) {
        return Double.compare(this.salary, other.salary);
    }
    @Override
    public String toString() {
        return "Employee{name='" + name + "', salary=" + salary + "}";
    }
}

class SalaryComparator implements Comparator<Employee> {
    @Override
    public int compare(Employee e1, Employee e2) {
        return Double.compare(e2.getSalary(), e1.getSalary());
    }
}

public class Prac1A {
    public static void main(String[] args) {
        List<Employee> employees = new ArrayList<>();
        employees.add(new Employee("Alice", 70000));
        employees.add(new Employee("Bob", 50000));
        employees.add(new Employee("Charlie", 60000));
        Collections.sort(employees);
        System.out.println("Employees sorted by salary (ascending):");
        for (Employee emp : employees) {
            System.out.println(emp);
        }
        Collections.sort(employees, new SalaryComparator());
        System.out.println("\nEmployees sorted by salary (descending):");
        for (Employee emp : employees) {
            System.out.println(emp);
        }
    }
}
```

Output :

```
Employees sorted by salary (ascending):  
Employee{name='Bob', salary=50000.0}  
Employee{name='Charlie', salary=60000.0}  
Employee{name='Alice', salary=70000.0}
```

```
Employees sorted by salary (descending):  
Employee{name='Alice', salary=70000.0}  
Employee{name='Charlie', salary=60000.0}  
Employee{name='Bob', salary=50000.0}
```