Experiment- 6

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Subject Name: Project Based Learning in Java with Lab **Subject Code: 22CSH-359**

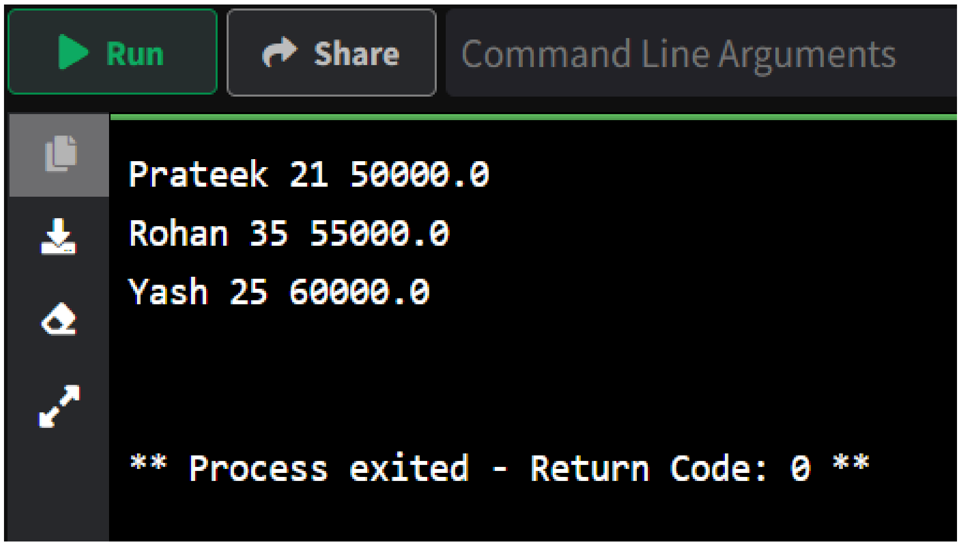
1. **(a) Aim:** Write a program to sort a list of Employee objects (name, age, salary) using lambda expressions.

2. **Implementation:**

```
import java.util.*;

class Employee {
    String name;
    int age;
    double salary;

    public Employee(String name, int age, double salary) {
        this.name = name;
        this.age = age;
        this.salary = salary;
    }

    public String toString() {
        return name + " " + age + " " + salary;
    }
}

public class Main {
    public static void main(String[] args) {
        List<Employee> employees = new ArrayList<>();
        employees.add(new Employee("Prateek", 21, 50000));
```

```
            employees.add(new Employee("Yash", 25, 60000));
            employees.add(new Employee("Rohan", 35, 55000));

            employees.sort(Comparator.comparingDouble(e -> e.salary));
            employees.forEach(System.out::println);
        }
    }
```

3. **Output:**



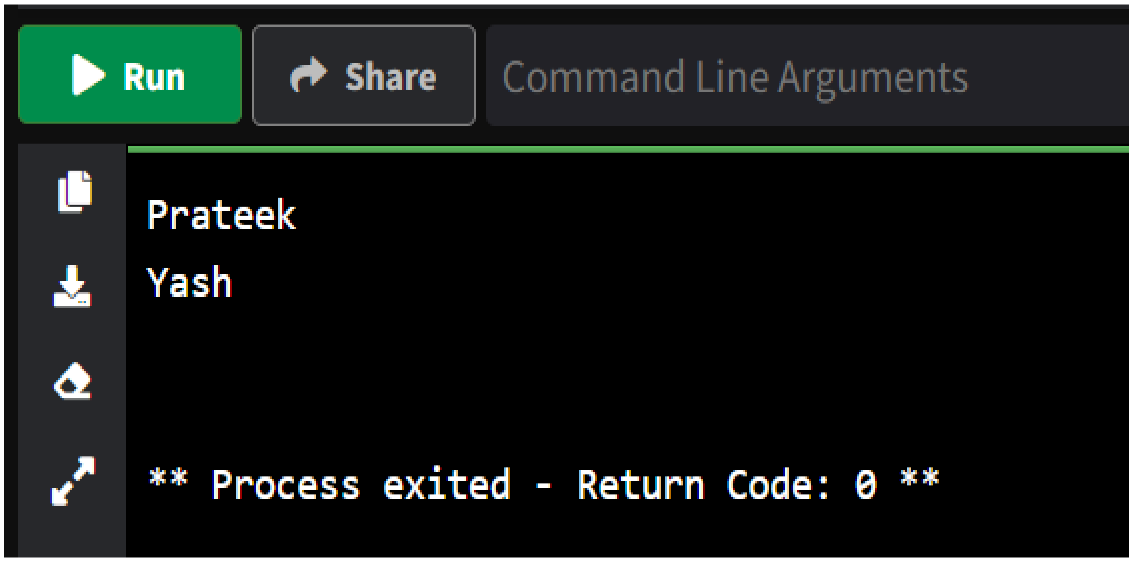
```
Prateek 21 50000.0
Rohan 35 55000.0
Yash 25 60000.0


** Process exited - Return Code: 0 **
```

1. (b) Aim: Create a program to use lambda expressions and stream operations to filter students scoring above 75%, sort them by marks, and display their names

2. Implementation :

```
import java.util.*;
import java.util.stream.*;

class Student {
    String name;
    double marks;

    public Student(String name, double marks) {
        this.name = name;
        this.marks = marks;
    }
}

public class Main {
    public static void main(String[] args) {
        List<Student> students = new ArrayList<>();
        students.add(new Student("Prateek", 80));
        students.add(new Student("Rohan", 65));
        students.add(new Student("Yash", 90));
        students.add(new Student("Tej", 70));

        students.stream()
                .filter(s -> s.marks > 75)
                .sorted(Comparator.comparingDouble(s -> -s.marks))
                .map(s -> s.name)
                .forEach(System.out::println);
    }
    }
```

3. **Output :**



```
Prateek
Yash


** Process exited - Return Code: 0 **
```