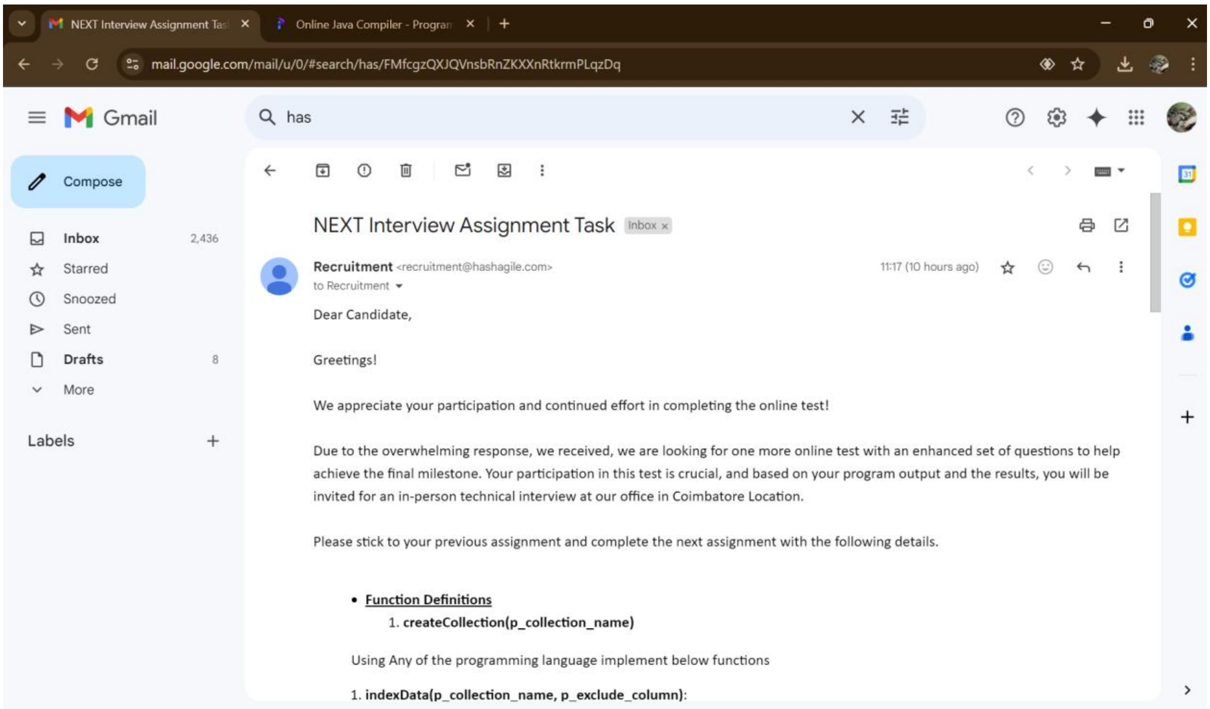
SECOND ROUND MAIL:



NEXT Interview Assignment Tas
Online Java Compiler - Progran
mail.google.com/mail/u/0/#search/has/FMfcgzQXJQVnsbRnZKXXnRtkrmPLqzDq
Gmail
has
Compose
Inbox 2,436
Starred
Snoozed
Sent
Drafts 8
More
Labels
Inbox ×

NEXT Interview Assignment Task

Recruitment <recruitment@hashagile.com>
to Recruitment

11:17 (10 hours ago)

Dear Candidate,

Greetings!

We appreciate your participation and continued effort in completing the online test!

Due to the overwhelming response, we received, we are looking for one more online test with an enhanced set of questions to help achieve the final milestone. Your participation in this test is crucial, and based on your program output and the results, you will be invited for an in-person technical interview at our office in Coimbatore Location.

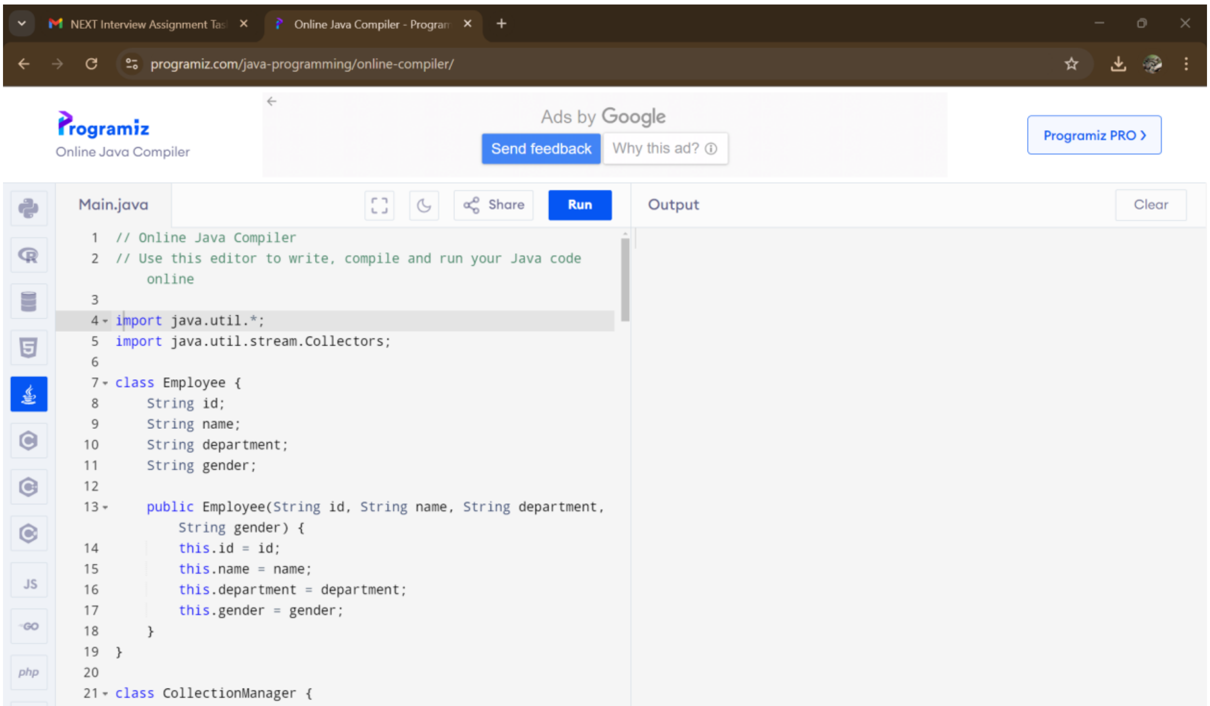
Please stick to your previous assignment and complete the next assignment with the following details.

- **Function Definitions**
  1. **createCollection(p_collection_name)**

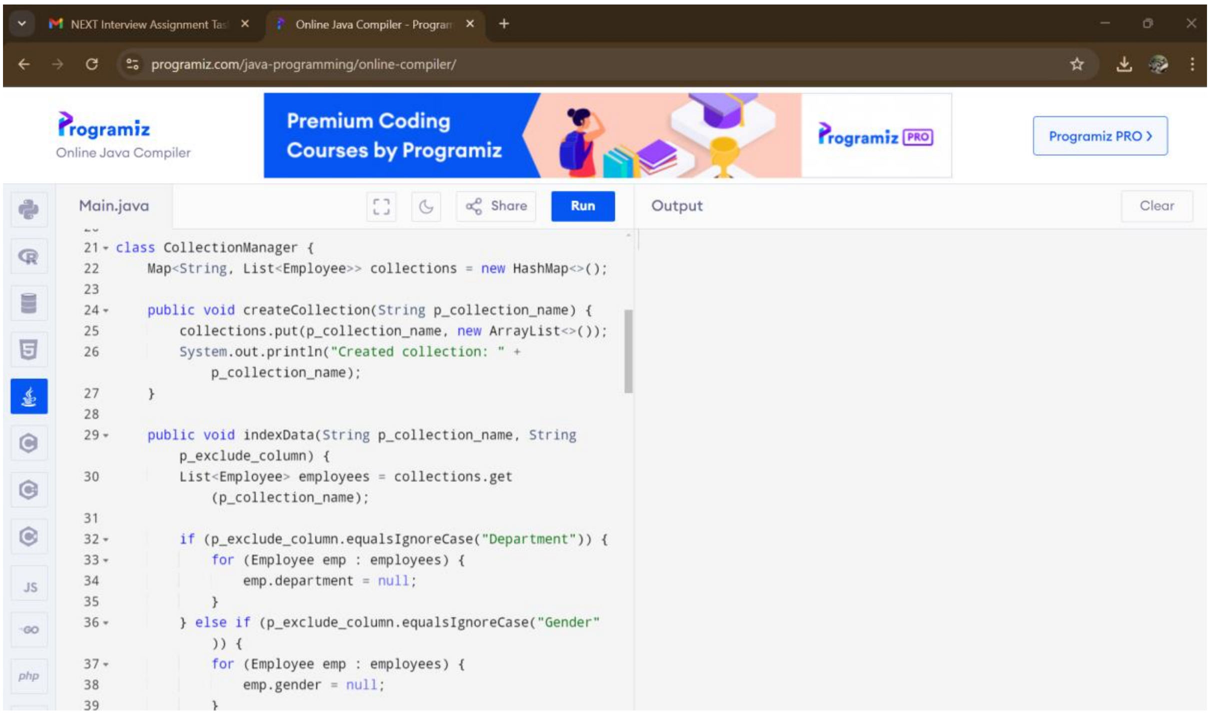
Using Any of the programming language implement below functions

1. **indexData(p_collection_name, p_exclude_column)**:

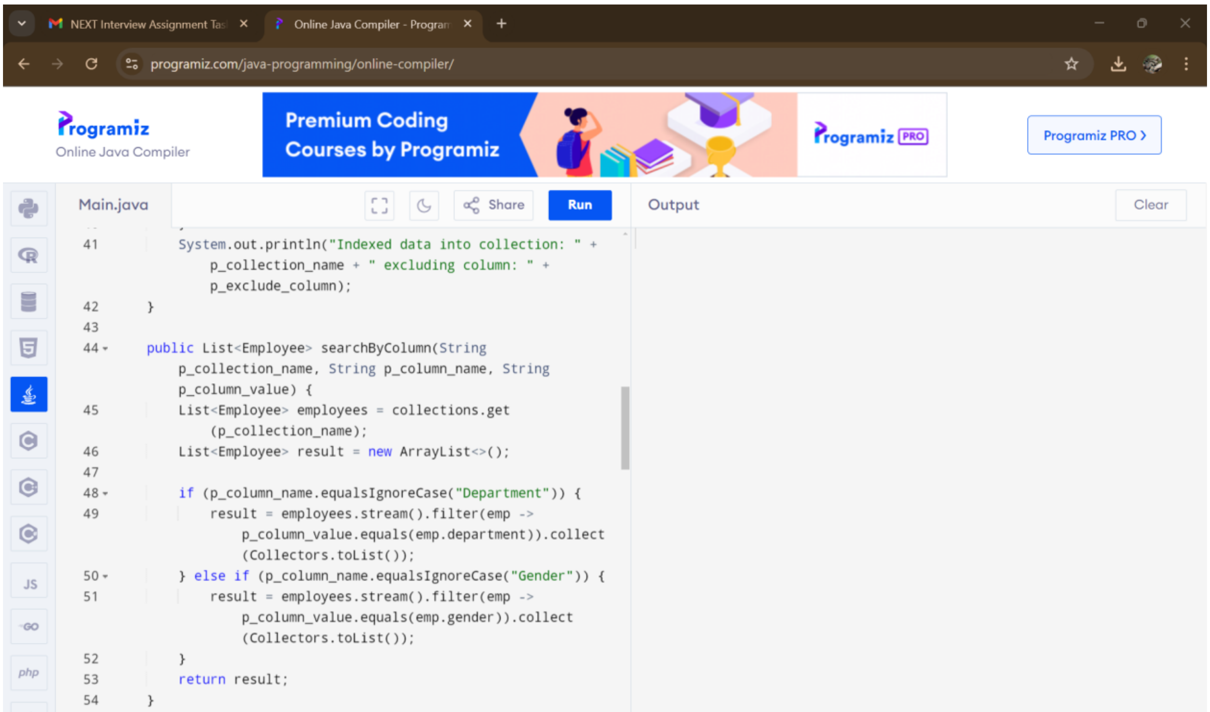
PROGRAM:



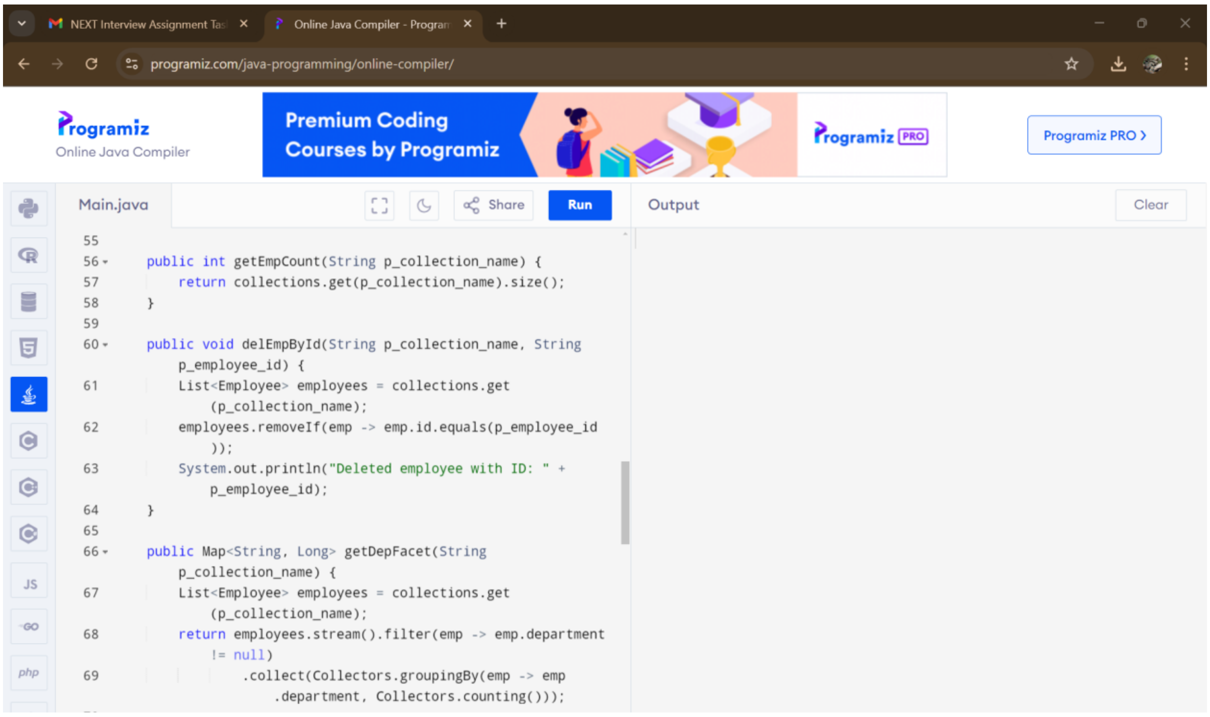
```java
// Online Java Compiler
// Use this editor to write, compile and run your Java code online

import java.util.*;
import java.util.stream.Collectors;

class Employee {
    String id;
    String name;
    String department;
    String gender;

    public Employee(String id, String name, String department, String gender) {
        this.id = id;
        this.name = name;
        this.department = department;
        this.gender = gender;
    }
}

class CollectionManager {
```


NEXT Interview Assignment Tas
Online Java Compiler - Progran
programiz.com/java-programming/online-compiler/
Programiz
Online Java Compiler
Premium Coding Courses by Programiz
Programiz PRO
Programiz PRO >
Main.java
Share
Run
Output
Clear
JS
GO
php

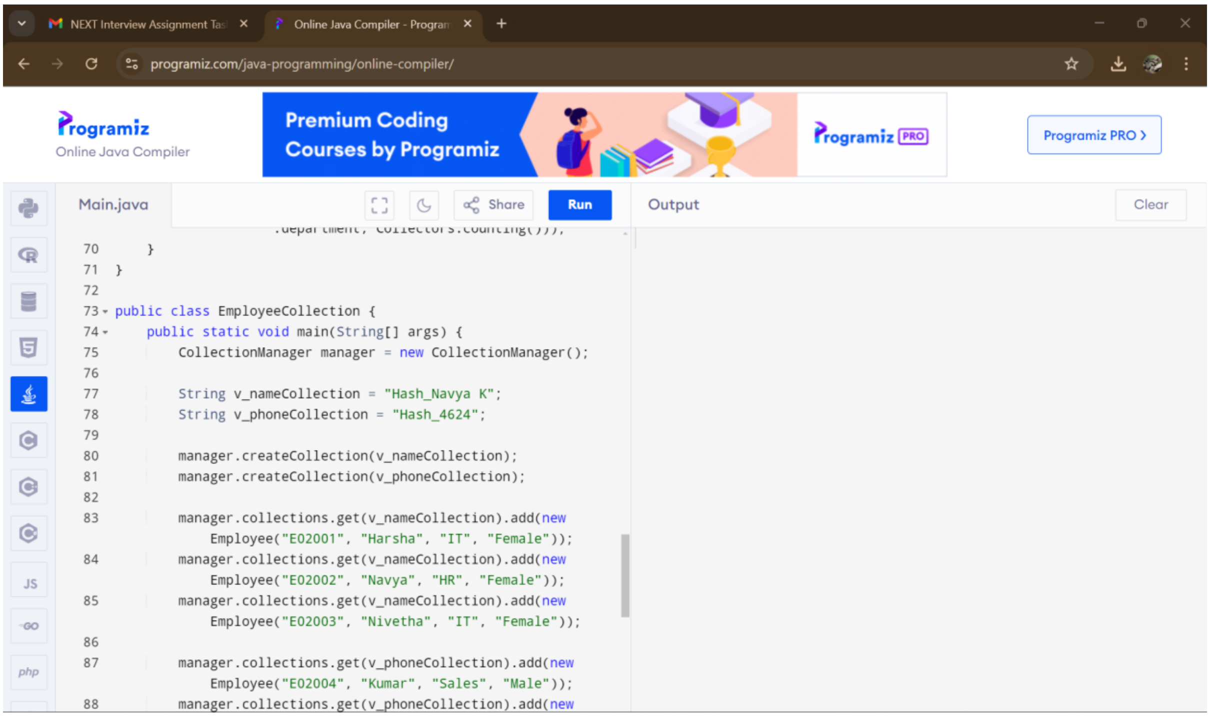
```java
class CollectionManager {
    Map<String, List<Employee>> collections = new HashMap<>();

    public void createCollection(String p_collection_name) {
        collections.put(p_collection_name, new ArrayList<>());
        System.out.println("Created collection: " + p_collection_name);
    }

    public void indexData(String p_collection_name, String p_exclude_column) {
        List<Employee> employees = collections.get(p_collection_name);

        if (p_exclude_column.equalsIgnoreCase("Department")) {
            for (Employee emp : employees) {
                emp.department = null;
            }
        } else if (p_exclude_column.equalsIgnoreCase("Gender")) {
            for (Employee emp : employees) {
                emp.gender = null;
            }
```


NEXT Interview Assignment Tas
Online Java Compiler - Program
programiz.com/java-programming/online-compiler/
Programiz
Online Java Compiler
Premium Coding Courses by Programiz
Programiz PRO
Programiz PRO ›
Main.java
Share
Run
Output
Clear

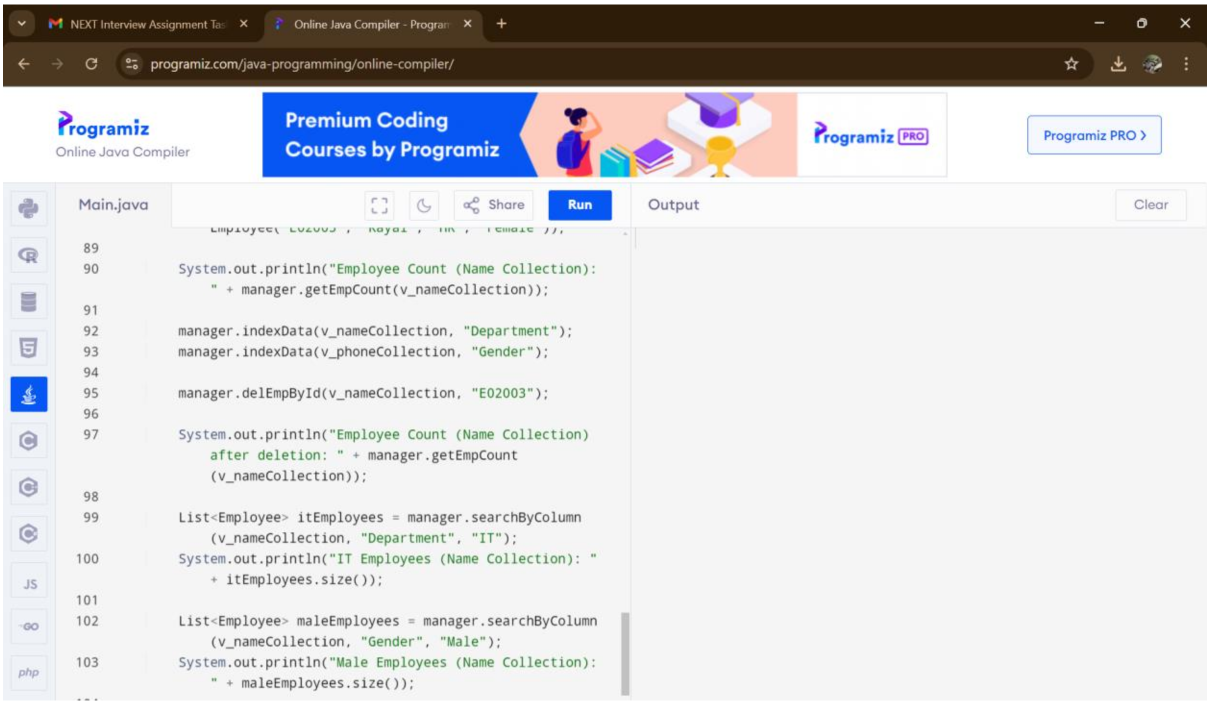
```java
        System.out.println("Indexed data into collection: " + p_collection_name + " excluding column: " + p_exclude_column);
    }

    public List<Employee> searchByColumn(String p_collection_name, String p_column_name, String p_column_value) {
        List<Employee> employees = collections.get(p_collection_name);
        List<Employee> result = new ArrayList<>();

        if (p_column_name.equalsIgnoreCase("Department")) {
            result = employees.stream().filter(emp -> p_column_value.equals(emp.department)).collect(Collectors.toList());
        } else if (p_column_name.equalsIgnoreCase("Gender")) {
            result = employees.stream().filter(emp -> p_column_value.equals(emp.gender)).collect(Collectors.toList());
        }
        return result;
    }
```


NEXT Interview Assignment Tas
Online Java Compiler - Program
programiz.com/java-programming/online-compiler/
Programiz
Online Java Compiler
Premium Coding Courses by Programiz
Programiz PRO
Programiz PRO ›
Main.java
Share
Run
Output
Clear

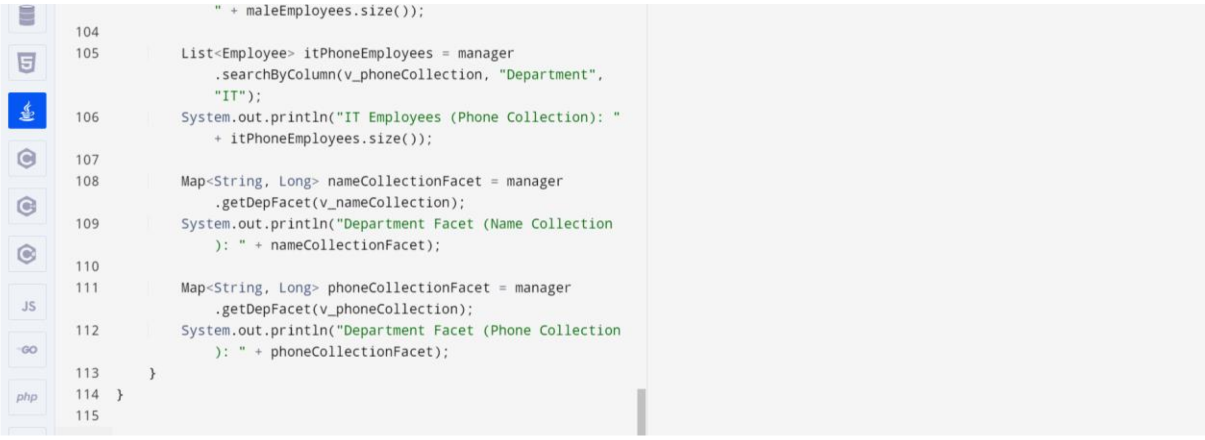
```java

    public int getEmpCount(String p_collection_name) {
        return collections.get(p_collection_name).size();
    }

    public void delEmpById(String p_collection_name, String p_employee_id) {
        List<Employee> employees = collections.get(p_collection_name);
        employees.removeIf(emp -> emp.id.equals(p_employee_id));
        System.out.println("Deleted employee with ID: " + p_employee_id);
    }

    public Map<String, Long> getDepFacet(String p_collection_name) {
        List<Employee> employees = collections.get(p_collection_name);
        return employees.stream().filter(emp -> emp.department != null)
                .collect(Collectors.groupingBy(emp -> emp.department, Collectors.counting()));
```


NEXT Interview Assignment Tas
Online Java Compiler - Program
programiz.com/java-programming/online-compiler/
Programiz
Online Java Compiler
Premium Coding Courses by Programiz
Programiz PRO
Programiz PRO ›
Main.java
Share
Run
Output
Clear

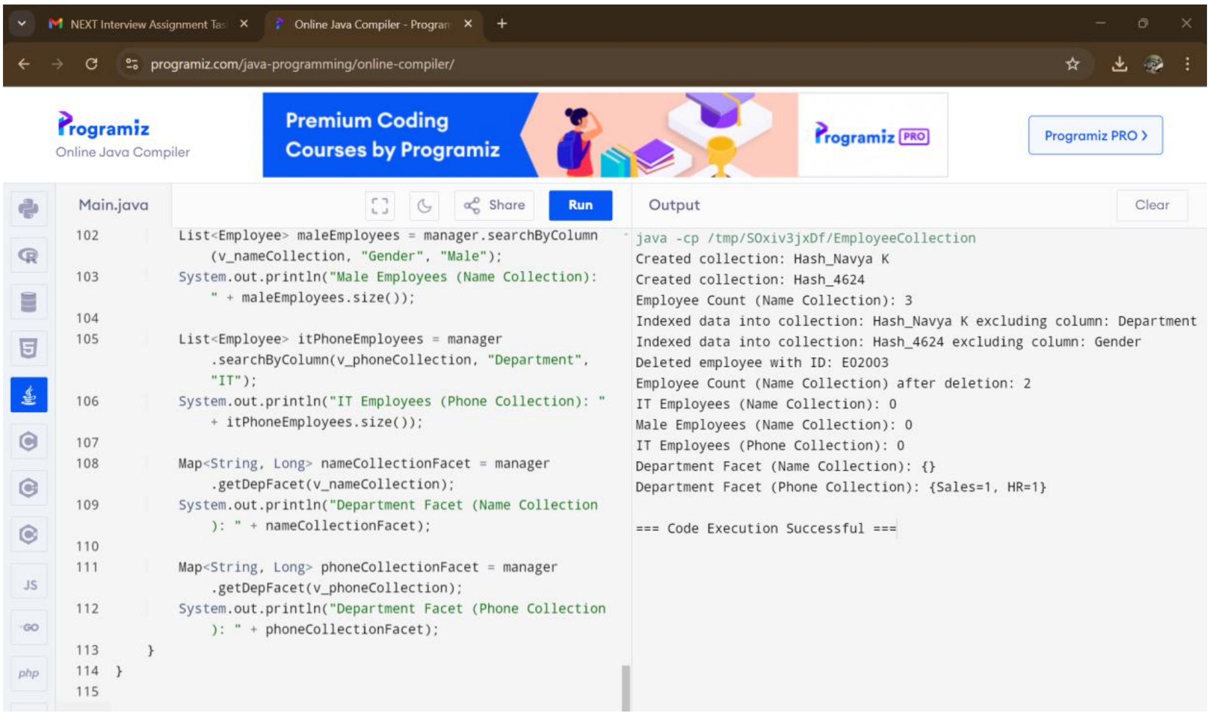
```java
                .department, Collectors.counting()));
    }
}

public class EmployeeCollection {
    public static void main(String[] args) {
        CollectionManager manager = new CollectionManager();

        String v_nameCollection = "Hash_Navya K";
        String v_phoneCollection = "Hash_4624";

        manager.createCollection(v_nameCollection);
        manager.createCollection(v_phoneCollection);

        manager.collections.get(v_nameCollection).add(new Employee("E02001", "Harsha", "IT", "Female"));
        manager.collections.get(v_nameCollection).add(new Employee("E02002", "Navya", "HR", "Female"));
        manager.collections.get(v_nameCollection).add(new Employee("E02003", "Nivetha", "IT", "Female"));

        manager.collections.get(v_phoneCollection).add(new Employee("E02004", "Kumar", "Sales", "Male"));
        manager.collections.get(v_phoneCollection).add(new
```


NEXT Interview Assignment Tas
Online Java Compiler - Program
programiz.com/java-programming/online-compiler/
Programiz
Online Java Compiler
Premium Coding Courses by Programiz
Programiz PRO
Programiz PRO ›
Main.java
Share
Run
Output
Clear

```java
            Employee("E02005", "Kayal", "HR", "Female"));

        System.out.println("Employee Count (Name Collection): " + manager.getEmpCount(v_nameCollection));

        manager.indexData(v_nameCollection, "Department");
        manager.indexData(v_phoneCollection, "Gender");

        manager.delEmpById(v_nameCollection, "E02003");

        System.out.println("Employee Count (Name Collection) after deletion: " + manager.getEmpCount(v_nameCollection));

        List<Employee> itEmployees = manager.searchByColumn(v_nameCollection, "Department", "IT");
        System.out.println("IT Employees (Name Collection): " + itEmployees.size());

        List<Employee> maleEmployees = manager.searchByColumn(v_nameCollection, "Gender", "Male");
        System.out.println("Male Employees (Name Collection): " + maleEmployees.size());
```



```java
            " + maleEmployees.size());

        List<Employee> itPhoneEmployees = manager
            .searchByColumn(v_phoneCollection, "Department",
            "IT");
        System.out.println("IT Employees (Phone Collection): "
            + itPhoneEmployees.size());

        Map<String, Long> nameCollectionFacet = manager
            .getDepFacet(v_nameCollection);
        System.out.println("Department Facet (Name Collection
            ): " + nameCollectionFacet);

        Map<String, Long> phoneCollectionFacet = manager
            .getDepFacet(v_phoneCollection);
        System.out.println("Department Facet (Phone Collection
            ): " + phoneCollectionFacet);
    }
}
```


NEXT Interview Assignment Tas
Online Java Compiler - Program
programiz.com/java-programming/online-compiler/
Programiz
Online Java Compiler
Premium Coding Courses by Programiz
Programiz PRO
Programiz PRO >
Main.java
Share
Run
Output
Clear

```java
        List<Employee> maleEmployees = manager.searchByColumn
            (v_nameCollection, "Gender", "Male");
        System.out.println("Male Employees (Name Collection):
            " + maleEmployees.size());

        List<Employee> itPhoneEmployees = manager
            .searchByColumn(v_phoneCollection, "Department",
            "IT");
        System.out.println("IT Employees (Phone Collection): "
            + itPhoneEmployees.size());

        Map<String, Long> nameCollectionFacet = manager
            .getDepFacet(v_nameCollection);
        System.out.println("Department Facet (Name Collection
            ): " + nameCollectionFacet);

        Map<String, Long> phoneCollectionFacet = manager
            .getDepFacet(v_phoneCollection);
        System.out.println("Department Facet (Phone Collection
            ): " + phoneCollectionFacet);
    }
}
```

```
java -cp /tmp/SOxiv3jxDf/EmployeeCollection
Created collection: Hash_Navya K
Created collection: Hash_4624
Employee Count (Name Collection): 3
Indexed data into collection: Hash_Navya K excluding column: Department
Indexed data into collection: Hash_4624 excluding column: Gender
Deleted employee with ID: E02003
Employee Count (Name Collection) after deletion: 2
IT Employees (Name Collection): 0
Male Employees (Name Collection): 0
IT Employees (Phone Collection): 0
Department Facet (Name Collection): {}
Department Facet (Phone Collection): {Sales=1, HR=1}

=== Code Execution Successful ===
```