

Assignment

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Subject : CSA0914 Java

Arraylist operation:

1. Write a Java program to perform the following operation using an array list. Add Elements to the list

```
import java.util.ArrayList;
import java.util.Scanner;

public class ArrayListOperation {
    ArrayList<String> list = new ArrayList<>();
    System.out.println("enter the name:");
    while (true) {
        String input = scanner.nextLine();
        list.add(input);
    }
    System.out.println("enter name to search");
    String searchname = scanner.next();
    if (list.contains(searchname)) {
        System.out.println("found")
    } else {
        System.out.println("not found");
    }
}
```

Create a program that demonstrate that use of hash set store collection of names

```
import java.util.HashSet;
import java.util.Scanner;

public class hash operation {
    public static void main (String[] args) {
        HashSet<String> names = new HashSet<>();
        Scanner sc = new Scanner(System.in);
        System.out.println("enter name to remove");
        String remove name = sc.nextLine();
        names.remove(remove name);
        if (names.contains(remove name)) {
            System.out.println("name not found");
        } else {
            System.out.println("name removed successfully");
        }
        for (String name : names) {
            System.out.println(name);
        }
        sc.close();
    }
}
```

Create a hashmap that stores student IDs and their names your program should add key value hashmap.

```
import java.util.HashMap;
import java.util.Scanner;

public class HashMapOperation {
    public static void main (String[] args) {
        HashMap<Integer>
        Student Map = new HashMap<>();
        Scanner s = new Scanner (System.in);
        System.out.print ("Enter student ID");
        if SearchID = scanner.nextInt();
        if (Student name != null) {
            System.out.println ("Found student")
        } else {
            System.out.print ("NO student found");
            int Remove ID = scanner.nextInt();
            for (Integer id: Student Map.keySet()) {
                System.out.println ("ID");
            }
            Scanner.close();
        }
    }
}
```

8 Write a java program that demonstrate to work of a priority queue to share employees, include functionality and priority.

```
import java.util.PriorityQueue;
import java.util.Scanner;
```

```
public class Priority Queue Operations {
    public static void main (String[] args) {
        Priority Queue <Employee> queue;
        while (true) {
```

```
            String input = scanner.nextLine();
```

```
            if (input.equals("ignore case ('exit')"))
```

```
                {
```

```
                    static class Employee implements Comparable
                        <Employee>
```

```
                        {
```

```
                            String name;
```

```
                            int priority;
```

```
                            this.name = name;
```

```
                            this.priority = priority;
```

```
                        }
```

```
                        public int compareTo (Employee other) {
```

```
                            Return Integer.compare (this.priority,
```

```
                                other.priority);
```

```
                        }
```

```
                    }
```