

AssignmentArraylist Operations :

1. Write a Java program to perform the following Operations using an arraylist. Add elements to the list remove an element by index search for element & display.

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

Public class ArrayList operations {
    Public static void main(String[] args) {
        ArrayList<String> list = new ArrayList<>();
        System.out.println("enter the name:");
        while(true) {
            String input = Scanner.nextLine();
            if input equals Ignore Case ("Exit") break;
            list.add(input);
```

}

```
System.out.println("Enter name to Search");
String Searchname = Scanner.next();
int Position = list.indexOf(Search name);
if (Position != -1) {
    System.out.println("found");
} else {
    System.out.println("not found");
```

}

}

Create a program that demonstrates that use of HashSet
Store collection of names. Add a name to set and
remove from set, check set and display all the names.

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

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

```
Public class Hash Operations {
```

```
    Public Static void main(String[] args){
```

```
        HashSet<String> names = new HashSet<>();
```

```
        System.out.println("enter name to remove");
```

```
        String remove name = Scanner.nextLine();
```

```
        names.remove(remove name);
```

```
        System.out.println("enter name to check:");
```

```
        String check name = Scanner.nextLine();
```

```
        if (names contains (check name)) {
```

```
            System.out.println(check name);
```

```
        } else {
```

```
            System.out.println("Current name");
```

```
            for (String name : names) {
```

```
                System.out.println(name);
```

```
            } Scanner close();
```

```
        }
```

```
    }
```

Write a java program that demonstrates the use of a priority queue to share employee, include functionality and priorities and employee & display a queue.

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

```
Public class priority Queue Operations {
```

```
    Public static void main(String[] args){
```

```
        Priority queue < employee > queue;
```

```
        Scanner S = new Scanner (System.in);
```

```
        System.out.println ("Enter the names");
```

```
        While(true){
```

```
            String input = Scanner.next line();
```

```
            if (input.equalsIgnore Case ("exit"));
```

```
        }
```

```
        Static Class Employee implements Comparable < Employee >
```

```
{
```

```
    String name;
```

```
    int Priority;
```

```
    Employee (String name, int Priority) {
```

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

```
        this.Priority = Priority;
```

```
    }
```

```
    Public int Compare to (Employee others) {
```

```
        return integer. Compare (this. Priority)
```

```
    }
```

```
}
```

```
}
```


Create a Hashmap that stores student IDs and their names your program should add Key Value Hashmap. Removing a student using their ID display all student entries.

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

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

```
public class Hashmap operations {
```

```
    public static void main (String[] args) {
```

```
        HashMap < Integer, String >
```

```
        Student Map : new HashMap < > ();
```

```
        Scanner S = new Scanner (System.in);
```

```
        System.out.println ("Enter student ID");
```

```
        if (search ID = Scanner.nextInt());
```

```
        if (Student name != null) {
```

```
            System.out.println ("found Student");
```

```
        } else {
```

```
            System.out.println ("No Student found");
```

```
            Print remove ID = Scanner.nextInt();
```

```
            System.out.println ("Current Student Entries");
```

```
            for (Integer id : Student map.keySet()) {
```

```
                System.out.println ("ID");
```

```
            }
```

```
            scanner.close();
```

```
        }
```

```
    }
```