Name :- B. Rakesh
Reg No :- 192211257
Date :- 20/09/2024

ASSIGNMENT-3

1. Arraylist operations :

```java
import java.util.scanner
public class Arraylist operations {
    public static void main (String [] args) {
        Arraylist < Integer > list = new Arraylist < > ();
            list.add (10);
            list.add (20);
            list.add(30);
            list.add(40);
            list.add(50);
    System.out.Println (list);
    list.remove (2);
    system.out.Println (list);
    int search element = 40
    int index = list.index of (search Element);
    if (index != -1) {
        system.out.Println (search Element +index);
    } else {
        system.out.Println(search element);
    }
    system.out.println ("Array list : ");
    for (Integer element : list) {
            System.out.println (element);
        }
    }
}
```

2. Hashset operations:

```java
import java.util.Hashset;
public class Hashset operations {
    public static void main (String [] args) {
        Hashset <string> names = new Hashset <> ();
        names.add ("John");
        names.add ("Alice");
        names.add ("Bob");
        names.add ("Daisy");
    System.out.println( names);
    names.remove ("Alice");
    System.out.println (names);
    String search Name = "Bob";
    if (names.contains(searchname)) {
        System.out.println(search Name);
    } else {
        System.out.println(search Name);
    }
    System.out.println ("Hashsets: ");
        for(String name : names) {
            System.out.println (names);
        }
    }
}
```

3. Priority queue operations:

```java
import java.util.PriorityQueue;
public class PriorityQueueoperations {
    public static void main(String[] args) {

    PriorityQueue<String> employeeQueue = new PriorityQueue();
        employeeQueue.add("John");
        employeeQueue.add("Alice");
        employeeQueue.add("Bob");
        employeeQueue.add("Daisy");

    System.out.println(employeeQueue);
    String highestPriorityEmployee = employeeQueue.poll();
    System.out.println(highestPriorityEmployee);
    System.out.println(employeeQueue);
    }
}
```

4. Hashmap operations :

```java
import java. util. Hashmap;
Public class Hashmap operations {
    Public static void main (String [] args) {
Hashmap < Integer , String > students = new Hashmap < >();

        students .Put (101, " John ");
        students. Put (102, "Alice");
        students . Put (103, "Bob");
        students. Put (104, "Daisy");
System. out. Println (students)
    int searchID = 103 ;
        if (students. Contains key (search ID)) {
            System. out. Println (students. get (search ID));

} else {
        System. out. Println (" search ID not found");

}
Students. remove (102);
System. out. Println( students);
System. out. Println ("Hash map. ");
for (Hashmap. Entry < Integer, String > entry : students. entry set()){
        System. out. Print ln (entry. get key () + entry. get value ());

    }
  }
}
```