Assignment

1. Arraylist operations :-

```
import java.util.ArrayList;
public class ArrayListOperation {
    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 searchelement = 40;
    int index = list.indexOf(searchElement);
    if (index != -1) {
        system.out.println(searchElement + index);
    }else{
        system.out.println(searchElement);
}
    system.out.println("ArrayList:");
    for (Integer element : list) {
            system.out.println(element);
    }
}
}
```

2. Hashset operations:-

```
import java.util.HashSet;
public class HashSetOperations {
    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 searchName = "Bob";
    if (names.contains(searchname)) {
        System.out.println(searchName);
    }else{
    System.out.println(searchName);
}
System.out.println("Hashsets:");
    for (String name:names) {
        System.out.println(name);
}
}
```

3. priority queue operations: -

```
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(employee Queue);
}
}
```

4. Hashmap operations :-

```
import java.util.Hashmap;
public class HashmapOperations{
    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.containsKey(searchID)){
       system.out.println( students.get(searchID));
}else{
    system.out.println("search ID not found");
}
students.remove(102);
system.out.println(students);
system.out.println("Hashmap:");
for (Hashmap.Entry<Integer, String> entry : students.entrySet()){

   system.out.println(entry.getKey() + entry.getValue());
  }
}
}
```