## **Lab Assignments java Collections**

## 1. What is the output of the following program?

```
import java.util.*;
public class priorityQueue {
       public static void main(String[] args)
       {
              PriorityQueue<Integer> queue
                     = new PriorityQueue<>();
              queue.add(11);
              queue.add(10);
              queue.add(22);
              queue.add(5);
              queue.add(12);
              queue.add(2);
              while (queue.isEmpty() == false)
                     System.out.printf("%d ", queue.remove());
              System.out.println("\n");
       }
}
a) 11 10 22 5 12 2
b) 2 12 5 22 10 11
c) 2 5 10 11 12 22
d) 22 12 11 10 5 2
2. What is the output of the following program?
import java.util.*;
public class Treeset {
       public static void main(String[] args)
       {
              TreeSet<String> treeSet = new TreeSet<>();
              treeSet.add("inube");
              treeSet.add("Java");
              treeSet.add("Geeks");
              treeSet.add("inubeJavaGeeks");
```

```
for (String temp: treeSet)
                                      System.out.printf(temp + " ");
                          System.out.println("\n");
            }
eclipse-workspace - QueueAssignment/src/Treeset.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Q 🔡 🐉
🆺 Project Explorer 🗴 🗎 🕏 👸 🥊 🗖 🗓 Exercise7, java 📝 ArrayExampl... 📝 DoWhileExam... 📝 priorityQueu... 📝 Treeset.java 🗴 🐾
                                                                                                                                   □ □ □ Outline ×
                                                                                                                                                                   - -
                                            1 import java.util.*;
2 public class Treeset {
3⊖ public static void main(String[] args)
4 {
> ConnectionAssignment
> Kumar
> Kumar
                                                                                                                                                  > O Treeset
TreeSet<String> treeSet = new TreeSet<>();
  > M JRE System Library [jdk-21]

> M src

✓ ∰ (default package)

     > priorityQueue.java
> Treeset.java
    > I Treeset.java
                                                     for (String temp : treeSet)
    System.out.printf(temp + " ");
> SenthilAssign
> SenthilAssign3
                                                     System.out.println("\n");
 > SenthilAssign4
 > 📂 SenthilAssign5
> 🔂 SenthilAssign7
 > 🔐 Setexample
                                          ■ Console ×
                                                                                                                               <terminated> Treeset [Java Application] C\Program Files\Uava\jdk-21\bin\javaw.exe (03-Nov-2023, 7:59:30 pm - 7:59:31 pm) [pid: 10832] Geeks Java inube inubeJavaGeeks
                                                                                  Smart Insert
                                                                                                  20:1:356
                                                                 Writable

√□ □ ≈ / □ □

                                                                                                                                       ^ ♣ 📾 🦟 ♦)) ENG 20:00 03-11-2023
                                                  o 🛱 🥲 📜 헢 🌀 🔘 🛢 🦪 👊
 Type here to search
```

## 3. What is the output of the following program?

```
import java.util.*;
public class linkedList {
    public static void main(String[] args)
    {
        List<String> list1 = new LinkedList<>();
        list1.add("Java");
        list1.add("For");
        list1.add("Geeks");
        list1.add("JFG");
        list1.add("JavaforGeeks");

        List<String> list2 = new LinkedList<>();
        list2.add("Geeks");
```

```
for (String temp: list1)
                    System.out.printf(temp + " ");
             System.out.println();
      }
}
a) For Java JFG JavaforGeeks
b) For JavaforGeeks JFG
c) For JFG for
d) For JFG JavaforGeeks
Correct answer: Java For JFG JavaforGeeks
4) Which of the given choices is a possible output?
import java.util.*;
public class hashSet {
      public static void main(String[] args)
      {
             HashSet<String> hashSet = new HashSet<>();
             hashSet.add("Geeks");
             hashSet.add("For");
             hashSet.add("Geeks");
             hashSet.add("GeeksforGeeks");
             System.out.println(hashSet);
      }
}
Answer: [GeeksforGeeks, Geeks, For]
a) [Geeks, For, Geeks, GeeksforGeeks]
```

## b) [GeeksforGeeks, Geeks, For]

```
5. What is the output of the following program?
import java.util.*;
public class stack {
      public static void main(String[] args)
      {
             List<String> list = new LinkedList<>();
             list.add("Geeks");
             list.add("For");
             list.add("Geeks");
             list.add("GeeksforGeeks");
             Iterator<Integer> iter = list.iterator();
             while (iter.hasNext())
                   System.out.printf(iter.next() + " ");
             System.out.println();
      }
}
a) Geeks for Geeks GeeksforGeeks
b) GeeksforGeeks Geeks for Geeks
c) Runtime Error
d) Compilation Error
```

Answer: Geeks For Geeks GeeksforGeeks