

```
1 package dj;
2 import java.util.Random;
3 import java.util.Scanner;
4
5 public class SortAndSearch {
6     public static void main(String[] args) {
7         int[] numbers = new int[50];
8         Random rand = new Random();
9         for (int i = 0; i < numbers.length; i++) {
10             numbers[i] = rand.nextInt(101);
11         }
12         System.out.println("Unordered list:");
13         displayArray(numbers);
14         Scanner scanner = new Scanner(System.in);
15         System.out.print("\nEnter the number to search: ");
16         int searchValue = scanner.nextInt();
17         int position = linearSearch(numbers, searchValue);
18         if (position != -1) {
19             System.out.println("Number " + searchValue + " found at position " + position);
20         } else {
21             System.out.println("Number " + searchValue + " not found.");
22         }
23         bubbleSort(numbers);
24         System.out.println("\nOrdered list:");
25         displayArray(numbers);
26         position = linearSearch(numbers, searchValue);
27         if (position != -1) {
28             System.out.println("Number " + searchValue + " found at position " + position + " in the ordered list.");
```

<terminated> SortAndSearch [Java Application] C:\Users\MAITHREYEE\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64.22.0.2.v20240802-1626\jre\bin\javaw.exe (22 Aug 2024, 8:14:19 am – 8:14:26 am) [pid: 23932]

Unordered list:

27 48 4 81 27 59 53 76 26 61 98 15 36 69 6 56 94 63 21 27 33 90 32 0 28 3 40 78 84 66 35 75 72 60 71 40 37 97 71 26 22 20 48 40 0 94 66 49 27 83

Enter the number to search: 2

Number 2 not found.

Ordered list:

0 0 3 4 6 15 20 21 22 26 26 27 27 27 27 28 32 33 35 36 37 40 40 40 48 48 49 53 56 59 60 61 63 66 66 69 71 71 72 75 76 78 81 83 84 90 94 94 97 98

Number 2 not found in the ordered list.