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package sorting;
import java.util.Scanner;
import java.util.Random;
public class Searching {
    public static void main(String[] args) {
        int[] num= new int[50];
        Random random=new Random();
        for (int i=0; i<num.length;i++) {
            num[i]=random.nextInt(101);
        }
        Scanner n= new Scanner(System.in);
        System.out.print("Random unsorted elements are:");
        displayArray(num);
        System.out.println("Enter the element between 0 to 100 ");
        int searchelement=n.nextInt();
        System.out.print(searchelement+"is in the position of the array is ");

        sequential_search(num,searchelement);
        int position=sequential_search(num,searchelement);
        if(position!=-1) {
            System.out.println(position);
        }
        else {
            System.out.println("element not found ");
        }
        bubbleSort(num);
        displayArray(num);
        System.out.println("elements after bubblesort :");
        int fposition=sequential_search(num,searchelement);
        if(fposition!=-1) {
            System.out.println(fposition);
        }
    }
}

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        System.out.println(fposition);
    }
    else {
        System.out.print("element not found");
    }
}

public static void displayArray(int[] array) {
    for (int i : array) {
        System.out.print(i + " ");
    }
    System.out.println();
}

public static int sequential_search(int[] array, int s) {
    for(int i=0; i<array.length; i++) {
        if(array[i]==s) {
            return i;
        }
    }
    return -1;
}

public static void bubbleSort(int[] array) {
    int n = array.length;
    boolean swapped;
    do {
        swapped = false;
        for (int i = 0; i < n - 1; i++) {
            if (array[i] > array[i + 1]) {
                int temp = array[i];

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                array[i] = array[i + 1];
                array[i + 1] = temp;
                swapped = true;
            }
        }
    } while (swapped);
}
}

```

Output:

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Random unsorted elements are:50 49 69 54 99 19 0 15 81 43 78 86 99 54 87 90 48 41 7 72 4 30 63 34 73 9 4 19 89 95 20 61 59 81 58 45 100 63 76 10 36 8 94 29 6 ^
Enter the element between 0 to 100
69
69 is in the position of the array is 2
0 4 4 6 7 8 9 10 15 19 19 20 24 29 30 34 36 41 43 45 48 49 50 54 54 58 59 59 61 63 63 67 69 72 73 76 78 78 81 81 86 87 89 90 94 95 99 99 100 100
elements after bubblesort :
32
```