https://course.acciojob.com/idle?question=e46af09f-0e6b-4d20-9e9d-5ee32c0f95a5

- EASY
- Max Score: 30 Points
-

Minimum number of swaps required to sort an array

You have been given an array 'ARR' of 'N' distinct elements.

Your task is to find the minimum no. of swaps required to sort the array.

For Example:

For the given input array [4, 3, 2, 1], the minimum no. of swaps required to sort the array is 2, i.e. swap index 0 with 3 and 1 with 2 to form the sorted array [1, 2, 3, 4].

Input Format

The first line of input contains an integer ‘N’ representing the size of the input array.

The second line of input contains the 'N' elements of the array separated by a single space.

Output Format

Print a single line containing a single integer which represents the minimum no. of swaps required to sort the array.

Example 1

Input

```
4
4 3 2 1
```

Output

```
2
```

Explanation

Swap index 0 with 3 i.e. 4 -> 1 and 1 with 2 i.e. 3 -> 2 to form the sorted array {1, 2, 3, 4}.

Example 2

Input

```
5
1 5 4 3 2
```

Output

```
2
```

Explanation

Swap index 1 with 4 i.e. 5 -> 2 and 2 with 3 i.e. 4 -> 3 to form the sorted array {1, 2, 3, 4, 5}.

Constraints

```
1 <= N <= 1000
0 <= ARR[i] <= 10 ^ 9
```

Topic Tags

- **Hashing**

My code

// n java

```
import java.util.*;
import java.lang.*;
import java.io.*;

public class Main
{
        public static void main (String[] args) throws
java.lang.Exception
        {
                //your code here
       Scanner s=new Scanner(System.in);
       int n=s.nextInt();
    int arr[]=new int[n];
       for(int i=0;i<n;i++)
         arr[i]=s.nextInt();
       int c=0;
        for(int i=0;i<n;i++){
          int min=arr[i],ind=i;
        for(int j=i;j<n;j++)
          {
           if(min>arr[j]) {min=arr[j];ind=j;}
          }
        if(min==arr[i]);
          else
         {
          c++;
           int t=arr[i];
           arr[i]=arr[ind];
           arr[ind]=t;
          }
```

```
        }
        System.out.print(c);




        }
}
```