

Policemen - Thieves 2

Problem

Submissions

Leaderboard

Discussions

an array of size N . Which has the following specifications: Each element in the array contains either a policeman or a thief. Each policeman can catch only one thief. A policeman cannot catch a thief who is more than K units away from him. We need to find the maximum number of thieves that can be caught.



Input Format

6
 P
 T
 P
 T
 T
 P
 3

Output Format

Maximum thieves caught: 3

Sample Input 0

6
P
T
P
T
T
P
3

Sample Output 0

Maximum thieves caught: 3

[f](#) [t](#) [in](#)

Contest ends in a month

Submissions: 70

Max Score: 10

Difficulty: Medium

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Java 15



```
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should
8            be named Solution. */
9         Scanner sc=new Scanner(System.in);
10        int count=0,p=0,t=0,m=0,l=0;
11        int n=sc.nextInt();
12        char arr[]=new char[n];
13        List<Integer> pr=new ArrayList<>();
14        List<Integer> tr=new ArrayList<>();
15        for(int i=0;i<n;i++){
16            arr[i]=sc.next().charAt(0);
17            if(arr[i]=='P')
18                pr.add(i);
19            else
20                tr.add(i);
21        }
22        int k=sc.nextInt();
23
24        int i=0,j=0;
25        while(i<pr.size() && j<tr.size()){
26            int prr=pr.get(i);
27            int trr=tr.get(j);
28            if(Math.abs(prr-trr)<=k){
29                count++;
30                i++;
31                j++;
32            }
33            else if(prr<trr){
34                i++;
35            }
36        }
37        System.out.println(count);
38    }
39 }
```

```
35         }
36     else{
37         j++;
38     }
39 }
40 System.out.print("Maximum thieves caught: "+count);
41 }
42 }
```

Line: 1 Col: 1

 [Upload Code as File](#) ☐ **Test against custom input**

Run Code

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