



Search...

Courses ▾

Placement ▾

Data Science ▾

GATE ▾



M

</> Problem

Editorial

Submissions

Aggressive Cows

Difficulty: Medium

Accuracy: 59.57%

Submissions: 169K+

Points: 4

Average Time: 30m

You are given an array with unique elements of **stalls[]**, which denote the positions of **stalls**. You are also given an integer **k** which denotes the number of aggressive cows. The task is to assign **stalls** to **k** cows such that the **minimum distance** between any two of them is the **maximum** possible.

Examples:

Input: stalls[] = [1, 2, 4, 8, 9], k = 3**Output:** 3**Explanation:** The first cow can be placed at stalls[0], the second cow can be placed at stalls[2] and the third cow can be placed at stalls[3].

The minimum distance between cows in this case is 3, which is the largest among all possible ways.

Input: stalls[] = [10, 1, 2, 7, 5], k = 3

C++ (12)

Start Timer

```
3     bool yes(vector<int> &stalls, int k, int dis)
4     {
5         int c=1,prev=stalls[0];
6         for(int i=1;i<stalls.size();i++)
7         {
8             if(stalls[i]-prev>=dis)
9             {
10                c++;
11                prev=stalls[i];
12            }
13        }
14        return c>=k;
15    }
16    int aggressiveCows(vector<int> &stalls, int k) {
17        // code here
18        sort(stalls.begin(),stalls.end());
19        int n= stalls.size();
20        int l=1,h=stalls[n-1]-stalls[0];
21        int ans=0;
22        while(l<=h)
23        {
24            int mid=l+(h-l)/2;
25            if(yes(stalls,k,mid))
26            {
27                ans=mid;
28                l=mid+1;
29            }
30            else{h=mid-1;}
```



Custom Input

Compile & Run

Submit

