

STUDENT REPORT

DETAILS

Name

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EXPERIMENT

Title

MINIMIZE THE HEIGHTS II

Description

Given an array **arr[]** denoting heights of **N** towers and a positive integer **K**.

For **each** tower, you must perform **exactly one** of the following operations **exactly once**.

- **Increase** the height of the tower by **K**
- **Decrease** the height of the tower by **K**

Find out the **minimum** possible difference between the height of the shortest and tallest towers after you have modified each tower.

You can find a slight modification of the problem [here](#).

Note: It is **compulsory** to increase or decrease the height by **K** for each tower. **After** the operation, the resultant array should **not** contain any **negative integers**.

Input:

K = 2, N = 4

Arr[] = {1, 5, 8, 10}

Output:

5

Source Code:

```
k=int(input())
n=int(input())
li=list(map(int,input().split()))
ind=0
for i in li:
    if i-k<=0:
        li[ind]=i+k
    else:
        li[ind]=i-k
    ind+=1
li.sort()
lent=len(li)-1
print(li[lent]-li[0])
```

RESULT

VIVA RESPONSES

Q)

Q)

Q)

Q)

Q)