Aggressive Cows

You are given an **array** consisting of **n integers** which denote the position of a **stall**. You are also given an **integer k** which denotes the number of aggressive cows. You are given the task of **assigning stalls to k cows** such that the **minimum distance between any two of them is the maximum possible**.

The first line of input contains two space-separated integers **n** and **k**.

The second line contains **n** space-separated integers denoting the position of the stalls.

Example 1:

```
Input:

n=5

k=3

stalls = [1 2 4 8 9]

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 also is the largest among all possible ways.
```

Example 2:

```
Input:

n=5

k=3

stalls = [10 1 2 7 5]

Output:

4
```

```
Explanation:

The first cow can be placed at stalls[0],

the second cow can be placed at stalls[1] and

the third cow can be placed at stalls[4].

The minimum distance between cows, in this case, is 4,

which also is the largest among all possible ways.
```

Your Task:

Complete the function int solve(), which takes integer n, k, and a vector stalls with n integers as input and returns the largest possible minimum distance between cows.

Expected Time Complexity: $O(n*\log(10^9))$.
Expected Auxiliary Space: $O(1)$.

Constraints:

$2 <= n <= 10^5$

$2 <= k <= n$

$0 <= stalls[i] <= 10^9$