You will be given a list of integers, arr, and a single integer k. You must create an array of length k from elements of arr such that its *unfairness* is minimized. Call that array $subarr$. Unfairness of an array is calculated as

$$max(subarr) - min(subarr)$$

Where:
- *max* denotes the largest integer in $subarr$.
- *min* denotes the smallest integer in $subarr$.

As an example, consider the array $[1, 4, 7, 2]$ with a k of 2. Pick any two elements, test $subarr = [4, 7]$.
$unfairness = max(4, 7) - min(4, 7) = 7 - 4 = 3$
Testing for all pairs, the solution $[1, 2]$ provides the minimum unfairness.

Note: Integers in arr may not be unique.

Function Description

Complete the *maxMin* function in the editor below. It must return an integer that denotes the minimum possible value of *unfairness*.

maxMin has the following parameter(s):

- *k*: an integer, the number of elements in the array to create
- *arr*: an array of integers .

Input Format

The first line contains an integer n, the number of elements in array arr.
The second line contains an integer k.
Each of the next n lines contains an integer $arr[i]$ where $0 \leq i < n$.

Constraints

$2 \leq n \leq 10^5$
$2 \leq k \leq n$
$0 \leq arr[i] \leq 10^9$

Output Format

An integer that denotes the minimum possible value of *unfairness*.

Sample Input 0

```
7
3
10
100
300
200
1000
20
30
```

Sample Output 0

```
20
```

Explanation 0

Here $k = 3$; selecting the 3 integers $10, 20, 30$, unfairness equals

```
max(10,20,30) - min(10,20,30) = 30 - 10 = 20
```

Sample Input 1

```
10
4
1
2
3
4
10
20
30
40
100
200
```

Sample Output 1

```
3
```

Explanation 1

Here $k = 4$; selecting the 4 integers $1, 2, 3, 4$, unfairness equals

```
max(1,2,3,4) - min(1,2,3,4) = 4 - 1 = 3
```

Sample Input 2

```
5
2
1
2
1
2
1
```

Sample Output 2

```
0
```

Explanation 2

Here $k = 2$. $subarr = [2, 2]$ or $subarr = [1, 1]$ give the minimum unfairness of 0.