

Minimum Distinct Elements

Given an array of numbers and an integer r , write a C program to print the minimum number of distinct elements after r removals using Merge Sorting.

Input Format

The first line contains two integers N and r where N is the number of elements in the list and r is the number of removals.

Each of the next N lines contains an integer represents an element in the list.

Constraints

- $1 \leq N \leq 10^4$
- $0 \leq \text{number} \leq 10^9$
- $0 \leq r \leq N$

Output Format

Print the minimum number of unique integers

Sample Input 0

```
7 3
1
2
2
3
4
4
5
```

Sample Output 0

```
2
```

Sample Input 1

```
4 1
1000
997
997
43
```

Sample Output 1

```
2
```

