

Non-Divisible Subset



Given a set of distinct integers, print the size of a maximal subset of S where the sum of any 2 numbers in S' is *not* evenly divisible by k .

Input Format

The first line contains 2 space-separated integers, n and k , the number of values in S and the *non* factor. The second line contains n space-separated integers describing $S[i]$, the unique values of the set.

Constraints

- $1 \leq n \leq 10^5$
- $1 \leq k \leq 100$
- $1 \leq S[i] \leq 10^9$
- All of the given numbers are distinct.

Output Format

Print the size of the largest possible subset (S').

Sample Input

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

Sample Output

```
3
```

Explanation

The sums of all permutations of two elements from $S = \{1, 7, 2, 4\}$ are:

```
1 + 7 = 8
1 + 2 = 3
1 + 4 = 5
7 + 2 = 9
7 + 4 = 11
2 + 4 = 6
```

We see that only $S' = \{1, 7, 4\}$ will not ever sum to a multiple of $k = 3$.