Non-Divisible Subset

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

Input Format

The first line contains 2 space-separated integers, n and k, respectively.
The second line contains n space-separated integers (we'll refer to the i^{th} value as a_i) describing the unique values of the set.

Constraints

- $1 \leq n \leq 10^5$
- $1 \leq k \leq 100$
- $1 \leq a_i \leq 10^9$
- 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 largest possible subset of integers is $S' = \{1, 7, 4\}$, because no two integers will have a sum that is evenly divisible by $k = 3$:

- $1 + 7 = 8$, and 8 is not evenly divisible by 3.
- $1 + 4 = 5$, and 5 is not evenly divisible by 3.
- $7 + 4 = 11$, and 11 is not evenly divisible by 3.

The number 2 cannot be included in our subset because it will produce an integer that is evenly divisible by $k = 3$ when summed with any of the other integers in our set:

- $1 + 2 = 3$, and $\frac{3}{3} = 1\ (\textbf{remainder } 0)$.
- $4 + 2 = 6$, and $\frac{6}{3} = 2\ (\textbf{remainder } 0)$.
- $7 + 2 = 9$, and $\frac{9}{3} = 3\ (\textbf{remainder } 0)$.

Thus, we print the length of S' on a new line, which is 3.