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PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION

# P. Preparation for International Women's Day

time limit per test: 2 seconds memory limit per test: 256 megabytes

International Women's Day is coming soon! Polycarp is preparing for the holiday.

There are n candy boxes in the shop for sale. The i-th box contains  $d_i$  candies.

Polycarp wants to prepare the maximum number of gifts for k girls. Each gift will consist of **exactly two** boxes. The girls should be able to share each gift equally, so the total amount of candies in a gift (in a pair of boxes) should be divisible by k. In other words, two boxes i and j ( $i \neq j$ ) can be combined as a gift if  $d_i + d_j$  is divisible by k.

How many boxes will Polycarp be able to give? Of course, each box can be a part of no more than one gift. Polycarp cannot use boxes "partially" or redistribute candies between them.

### Input

The first line of the input contains two integers n and k ( $1 \le n \le 2 \cdot 10^5, 1 \le k \le 100$ ) — the number the boxes and the number the girls.

The second line of the input contains n integers  $d_1, d_2, \ldots, d_n$  ( $1 \le d_i \le 10^9$ ), where  $d_i$  is the number of candies in the i-th box.

# **Output**

Print one integer — the maximum number of the boxes Polycarp can give as gifts.

#### Fyamples

Examples	
input	Сору
7 2	
1 2 2 3 2 4 10	
output	Сору
5	
input	Сору
	СОРУ
8 2	
1 2 2 3 2 4 6 10	
output	Сору
8	
input	Сору
7 3	
1 2 2 3 2 4 5	
output	Сору
4	

# Note

In the first example Polycarp can give the following pairs of boxes (pairs are presented by **indices of corresponding boxes**):

- (2,3);
- (5,6);
- (1,4)

So the answer is 6.

In the second example Polycarp can give the following pairs of boxes (pairs are presented by **indices of corresponding boxes**):

- (6,8);
- (2,3);
- (1,4);
- (5,7).

So the answer is 8.

In the third example Polycarp can give the following pairs of boxes (pairs are presented by **indices of corresponding boxes**):

- (1, 2);
- (6,7).

So the answer is 4.

### <u>ICPC Assiut University Training -</u> <u>Juniors Phase 1 Sheets-2022</u>

#### **Public**

## Participant



# → Group Contests

- Juniors Phase 1 Practice #5 (Bitmask, Bitset, Bits)
- Juniors Phase 1 Practice #4 (Binary search, Two pointers)
- Juniors Phase 1 Practice #3 (STL 2)
- Juniors Phase 1 Practice #2 (STL 1)
- Juniors Phase 1 Practice #1 ( Prefix sum , Frequency Array )

# Juniors Phase 1 Practice #1 ( Prefix sum, Frequency Array)

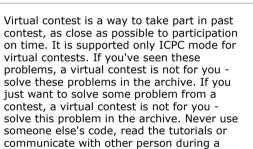
# **Finished**

# **Practice**



# → Virtual participation

virtual contest.



Start virtual contest

# → **Submit?**Language: GNU G++20 13.2 (64 bit, win ✔ Choose file: Choose File No file chosen Submit

→ Last submissions		
Submission	Time	Verdict
247458633	Feb/20/2024 13:02	Accepted
247457366	Feb/20/2024 12:51	Accepted
247456537	Feb/20/2024 12:41	Wrong answer on test 7
247456387	Feb/20/2024 12:39	Wrong answer on test 3
247456228	Feb/20/2024 12:38	Wrong answer on test 3
247455885	Feb/20/2024 12:33	Wrong answer on test 1
247455784	Feb/20/2024 12:32	Wrong answer on test 1
247453217	Feb/20/2024 12:21	Wrong answer on test 2