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K-Distribution

Submissions Attempted by: 211 | Solved by: 73 | Partially Solved by: 122 | ★★★★★☆

Combinatorics Dynamic Programming Hard Math Number Theory Edit

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🏆 June Clash '15

You are given N positive integers A_1, A_2, \dots, A_N . Find the number of ways to distribute them in 2 groups in such a way that sum of numbers in each group is greater or equal K . The answer can be large so output it modulo $10^9 + 7$.

Input

The first line contains two space-separated integers N and K . The second line contains N space-separated integers: A_1, A_2, \dots, A_N .

Output

Output one integer - answer for the question modulo $10^9 + 7$.

Constraints

- $0 < N \leq 100$
- $0 < A_i \leq 10^9$
- $0 < K \leq 10^5$
- $0 < N \leq 20$ in 28 % of the test data.

Sample Input [\(Plaintext Link\)](#)

```
2 5
6 6
```

Sample Output [\(Plaintext Link\)](#)

```
2
```

Time Limit: 1 sec(s) for each input file.

Memory Limit: 256 MB

Source Limit: 1024 KB

Marking Scheme: Marks are awarded if any testcase passes.

Allowed languages: C, CPP, CLOJURE, CSHARP, GO, HASKELL, JAVA, JAVASCRIPT, JAVASCRIPT_NODE, LISP, OBJECTIVEC, PASCAL, PERL, PHP, PYTHON, RUBY, R, RUST, SCALA

Problem Author: [Pavel Sheftelevich](#)

Problem Tester: [Bohdan Pryshchenko](#)

C

Upload file:

Choose File

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```
1 #include <stdio.h>
2
3 int main()
4 {
5     printf("Hello World!\n");
6     return 0;
7 }
8
```

1

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Roman Bi...		1.7096	C
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Parag Go...		1.71	C++
Parag Go...		2.2292	C++

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