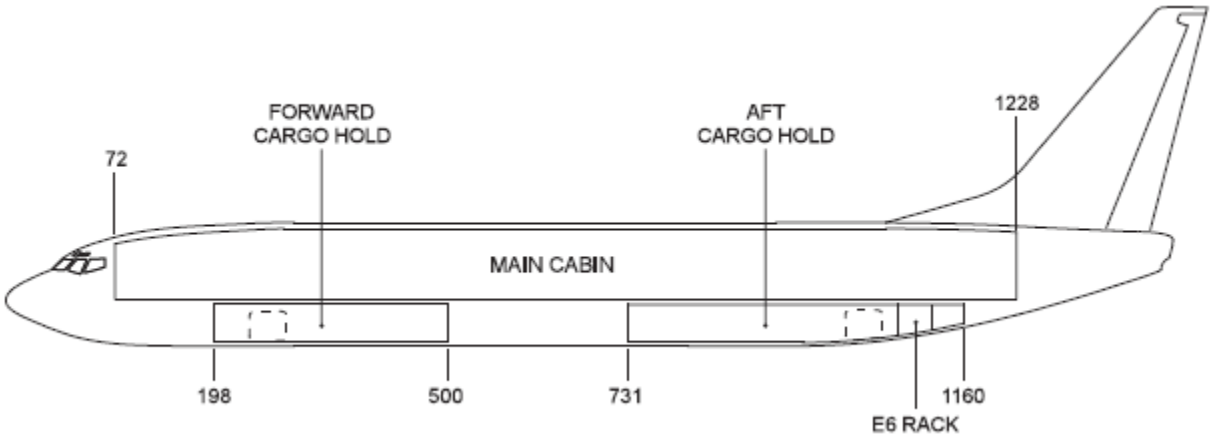
Problem E

Even Load

Problem ID: evenload

Time limit: 1 second



Commercial aircraft usually have two large cargo holds on their lower deck: one near the front of the aircraft, called the *forward* cargo hold, and one near the rear of the aircraft, called the *aft* cargo hold. For an aircraft to be balanced when it's flying, the load of all the aircraft's cargo needs to be distributed between the cargo holds carefully.

We need to ship N items of cargo on such an aircraft. The i^{th} item of cargo has weight w_i. According to the aircraft's safety guidelines, the absolute difference between the total weights of cargo in the forward hold, and cargo in aft hold, can not be more than K.

You need to write a program to determine if we can load all the cargo onto the aircraft, and distribute the load between the cargo holds, safely.

Input

The first line of input contains two space-seperated integers: N ($1 \leq N \leq 100$) and K ($1 \leq K \leq 1\,000$). The number of items to ship, and the maximum tollerable difference between the total weights of cargo in the two holds, respectively.

The second line of input contains N space-seperated integers. The i^{th} of which, w_i ($1 \leq w_i \leq 1\,000$), is the weight of the i^{th} item of cargo.

Output

Display a single line of output. If all the items of cargo can be loaded into the aircraft safely, output `YES`, otherwise output `NO`.

Sample Input 1	Sample Output 1
5 20 1 2 30 40 50	YES

Sample Input 2

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5 4
1 2 30 40 50
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Sample Output 2

```
NO
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Sample Input 3

```
2 40
2 50
```

Sample Output 3

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NO
```