

Bus Excursion (excursion)


Since you won the national finals of the coconut-flake blowing championship, the whole school can go on a bus trip. You'll be travelling in beautiful, new, perfectly identical buses!



Figure 1: We're setting off soon!

The organizers of the competition will let you know the bus capacity and how many buses they'll be sending in front of the school. The question arises: will everyone fit on the buses? It would be really embarrassing if you were the ones left behind!

Write a program that quickly determines whether the total seating capacity of the buses is more than or equal to the number of people in the school, in other words, if everyone can fit on the buses.

 Among the attachments of this task you may find a template file `excursion.*` with a sample incomplete implementation.

Input

The first line contains N , which tells us how many buses are being sent.

The second line contains K , which tells us how many seats are on each bus.

The third line contains S , which tells us the total number of people from the school who want to go on the trip.

Output

The output is a string. If everyone can fit on the buses, output YES; otherwise, output NO.




Constraints

- $1 \leq N \leq 1000$.

- $1 \leq K \leq 100$.
- $1 \leq S \leq 100\,000$.

Scoring

Your program will be tested against several test cases grouped in subtasks. In order to obtain the score of a subtask, your program needs to correctly solve all of its test cases.

- **Subtask 1** (0 points) Examples.

- **Subtask 2** (30 points) $N = 1$, only 1 bus is coming.

- **Subtask 3** (70 points) No additional limitations.


Examples

input	output
3 45 138	NO
8 50 375	YES

Explanation

In the **first example**, three buses with 45 seats each are sent, providing a total of $3 \cdot 45 = 135$ seats, which is less than 138. So, the output is **NO**, meaning not everyone can fit on the buses.

In the **second example**, eight buses with 50 seats each are sent, providing a total of $8 \cdot 50 = 400$ seats, which is greater than or equal to 375. So, the output is **YES**, meaning everyone can fit on the buses.