Problem I. Assertion

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

Alice boldly asserts to you that if you divide m items into n groups, there will definitely be one group with a quantity of items greater than or equal to d.

Due to Alice's excessive self-confidence, she is unaware that some of her assertions are actually incorrect. Your task is to determine whether Alice's assertion is correct. If Alice's assertion is true, output 'Yes'; otherwise, output 'No'.

Input

The input consists of multiple test cases. The first line contains a single integer $T(1 \leq T \leq 10^5)$ — the number of test cases. Description of the test cases follows.

The first line of each test case contains three integers n, m, d ($2 \leq m \leq 10^9, 1 \leq n < m, 0 \leq d \leq 10^9$) , n and m represent the number of groups and the quantity of items, respectively, in Alice's assertion. The symbol d signifies Alice's claim that there will always be at least one group with a quantity of items greater than or equal to d.

Output

For each set of data, output a string. If Alice's assertion is correct, output 'Yes'; otherwise, output 'No'.

Example

standard input	standard output
3 1 2 1 2 3 2 3 10 4	Yes Yes Yes