

A. Pineapple Incident

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

Ted has a pineapple. This pineapple is able to bark like a bulldog! At time t (in seconds) it barks for the first time. Then every s seconds after it, it barks twice with 1 second interval. Thus it barks at times $t, t + s, t + s + 1, t + 2s, t + 2s + 1$, etc.

Barney woke up in the morning and wants to eat the pineapple, but he can't eat it when it's barking. Barney plans to eat it at time x (in seconds), so he asked you to tell him if it's gonna bark at that time.

Input

The first and only line of input contains three integers t, s and x ($0 \leq t, x \leq 10^9, 2 \leq s \leq 10^9$) — the time the pineapple barks for the first time, the pineapple barking interval, and the time Barney wants to eat the pineapple respectively.

Output

Print a single "YES" (without quotes) if the pineapple will bark at time x or a single "NO" (without quotes) otherwise in the only line of output.

Examples

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|--------|
| input |
| 3 10 4 |
| output |
| NO |

| |
|--------|
| input |
| 3 10 3 |
| output |
| YES |

| |
|--------|
| input |
| 3 8 51 |
| output |
| YES |

| |
|--------|
| input |
| 3 8 52 |
| output |
| YES |

Note

In the first and the second sample cases pineapple will bark at moments 3, 13, 14, ..., so it won't bark at the moment 4 and will bark at the moment 3.

In the third and fourth sample cases pineapple will bark at moments 3, 11, 12, 19, 20, 27, 28, 35, 36, 43, 44, 51, 52, 59, ..., so it will bark at both moments 51 and 52.