Destroy the machine

Explanation- The machine will run at times T, T + D, T + D + 1, T + 2 * D, T + 2 * D + 1 … If you carefully observe, then you can find one thing that if (X – T) is multiple of D (mathematically, (X - T) % D == 0) then machine will be in 'running' state.

Other point is, if x is less is less than t, then machine will be in 'not running' state. If (X - T) % d == 1 and x is not equal to T + 1, then also machine will be in running state.

Note- For better understanding, read about modulo operator.

Code-

```c
#include<stdio.h>
#include<stdlib.h>


int main(){
    long long t, d, x;

    scanf("%lld", &t);
    scanf("%lld", &d);
    scanf("%lld", &x);
    if (((x - t) % d  == 0 || (x - t) % d  == 1) && (x != t + 1) && x >= t) {
        printf("YES");
    }
    else {
        printf("NO");
    }
}
```