

Will it stop?

Memory limit: **42 MiB**
Time limit: **1337 ms**

Vesim is a CS student. This semester he is really struggling to pass computability and formal language theory course. He asked for a last chance, so the professor gave him a task: "For a given Python program, tell me if it will eventually stop or not!". Sadly Vesim was pwning and reversing so he didn't have time to solve this problem. Could you help him?

The professor agreed to host the submission system on his private server.

Funny fact: At home the professor has a wide collection of flags from all over the world!

INPUT

First line of input contains number N .

Following N lines contain Python source code.

OUTPUT

If the given Python program stops, the output shall contain "YES", otherwise "NO".

EXAMPLES

| Input | Output |
|----------|--------|
| 2 | NO |
| while 1: | |
| pass | |

| | |
|----------------------|-----|
| 1 | YES |
| print("jctf{stop!}") | |