

## D. Strange Dialog

Time limit: 1s

Memory limit: 16 MB

One entity named "one" tells with his friend "puton" and their conversation is interesting. "One" can say words "out" and "output", besides he calls his friend by name. "Puton" can say words "in", "input" and "one". They understand each other perfect and even write dialogue in strings without spaces.

You have  $N$  strings. Find which of them are dialogues.

**Input**

In the first line of input there is one non-negative integer  $N \leq 1000$ . Next  $N$  lines contain non-empty strings. Each string consists of small Latin letters. Total length of all strings is no more than  $10^7$  characters.

**Output**

Output consists of  $N$  lines. Line contains word "YES", if string is some dialogue of "one" and "puton", otherwise "NO".

**Sample**

input	output
6	YES
puton	NO
inonputin	YES
oneputonininputoutoutput	NO
oneininputtwooutoutput	NO
outpu	NO
utput	

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