

PROBLEMS (/problems) STATUS (/status) RANKS (/ranks)

DISCUSS (http://spoj.com/forum) CONTESTS (/contests)

(/manageaccount/) (PROFILE -

Problems (/problems) / classical (/problems/classical) / Phone List

My status (/status/PHONELST,ahmed_yassin03/) Status (/status/PHONELST/) Ranking (/ranks/PHONELST/)

PHONELST - Phone List

no tags

Phone List

Given a list of phone numbers, determine if it is consistent in the sense that no number is the prefix of another. Let's say the phone catalogue listed these numbers:

- Emergency 911
- Alice 97 625 999
- Bob 91 12 54 26

In this case, it's not possible to call Bob, because the central would direct your call to the emergency line as soon as you had dialled the first three digits of Bob's phone number. So this list would not be consistent.

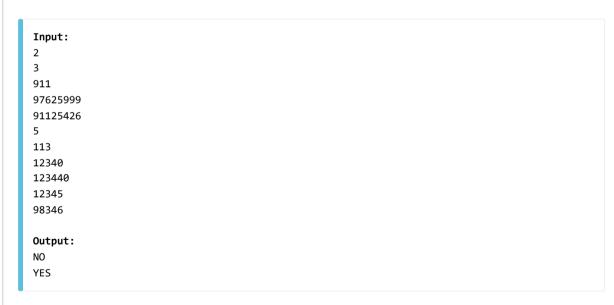
Input

The first line of input gives a single integer, $1 \le t \le 40$, the number of test cases. Each test case starts with n, the number of phone numbers, on a separate line, $1 \le n \le n$ 10000. Then follows *n* lines with one unique phone number on each line. A phone number is a sequence of at most ten digits.

Output

For each test case, output "YES" if the list is consistent, or "NO" otherwise.

Example



Submit solution! (/submit/PHONELST/)

hide comments

✓ Submit solution! (/submit/PHONELST/)



Andres Galvis Added by: (/users/andresgalvis)

2009-03-08 Date: Time limit: 1s Source limit: 50000B

Memory limit: 1536MB Cluster: Cube (Intel G860) (/clusters/)

All except: ERL JS-RHINO Languages: NODEJS PERL6 VB.NET Nordic Collegiate

Resource: **Programming Contest 2007**

