

1021 - Prerequisites?

Description

Freddie has chosen to take k courses. To meet the degree requirements, he must take courses from each of several categories. Can you assure Freddie that he will graduate, based on his course selection?

Input specification

Input consists of several test cases (no more than 50). For each case, the first line of input contains $1 \leq k \leq 100$, the number of courses Freddie has chosen, and $0 \leq m \leq 100$, the number of categories. One or more lines follow containing k 4-digit integers follow; each is the number of a course selected by Freddie. Each category is represented by a line containing $1 \leq c \leq 100$, the number of courses in the category, $0 \leq r \leq c$, the minimum number of courses from the category that must be taken, and the c course numbers in the category. Each course number is a 4-digit integer. The same course may fulfil several category requirements. Freddie's selections, and the course numbers in any particular category, are distinct. A line containing 0 follows the last test case.

Output specification

For each test case, output a line containing "yes" if Freddie's course selection meets the degree requirements; otherwise output "no".

Sample input

```
3 2
0123 9876 2222
2 1 8888 2222
3 2 9876 2222 7654
3 2
0123 9876 2222
2 2 8888 2222
3 2 7654 9876 2222
0
```

Sample output

```
yes
no
```

Hint(s)

Source	Waterloo Local Contest 2005 September 24 (Gordon Cormack)
Added by	ejaltuna
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Time limit (ms)	1000
Test limit (ms)	1000
Memory limit (kb)	131072
Output limit (mb)	64
Size limit (bytes)	100000
Enabled languages	C C# C++ Java Pascal Perl PHP Python Ruby Text