

# Prerequisites?

**Problem ID:** prerequisites  
**CPU Time limit:** 1 second  
**Memory limit:** 1024 MB  
**Difficulty:** 2.0

Freddie the frosh 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

Input consists of several test cases, at most 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. A line follow containing  $k$  4-digit integers; 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

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

### Sample Input 1

```
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 1

```
yes
no
```

