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# Angry Professor

 by [devuy11](#)

Problem

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A Discrete Mathematics professor has a class of  $N$  students. Frustrated with their lack of discipline, he decides to cancel class if fewer than  $K$  students are present when class starts.

Given the arrival time of each student, determine if the class is canceled.

## Input Format

The first line of input contains  $T$ , the number of test cases.

Each test case consists of two lines. The first line has two space-separated integers,  $N$  (students in the class) and  $K$  (the cancelation threshold). The second line contains  $N$  space-separated integers ( $a_1, a_2, \dots, a_N$ ) describing the arrival times for each student.

**Note:** Non-positive arrival times ( $a_i \leq 0$ ) indicate the student arrived early or on time; positive arrival times ( $a_i > 0$ ) indicate the student arrived  $a_i$  minutes late.

## Constraints

- $1 \leq T \leq 10$
- $1 \leq N \leq 1000$
- $1 \leq K \leq N$
- $-100 \leq a_i \leq 100$ , where  $i \in [1, N]$

## Output Format

For each test case, print the word **YES** if the class is canceled or **NO** if it is not.

## Note

If a student arrives exactly on time ( $a_i = 0$ ), the student is considered to have entered before the class started.

## Sample Input

```
2
4 3
-1 -3 4 2
4 2
0 -1 2 1
```

## Sample Output

```
YES
NO
```

## Explanation

For the first test case,  $K = 3$ . The professor wants at least 3 students in attendance, but only 2 have arrived on time ( $-3$  and  $-1$ ). Thus, the class is canceled.

For the second test case,  $K = 2$ . The professor wants at least 2 students in attendance, and there are 2 who have arrived on time (0 and  $-1$ ). Thus, the class is *not* canceled.



Submissions: 111335

Max Score: 20

Difficulty: Easy

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[If - Else statements](#)[More](#)

Current Buffer (saved locally, editable)

Python 2

```
1  #!/bin/python
2
3  import sys
4
5
6  t = int(raw_input().strip())
7  for a0 in xrange(t):
8      n,k = raw_input().strip().split(' ')
9      n,k = [int(n),int(k)]
10     a = map(int,raw_input().strip().split(' '))
11     count=0
12     for i in range(0,n):
13         if a[i]<=0:
14             count = count+1
15     if count<k:
16         print("YES")
17     else:
18         print("NO")
```

Line: 18 Col: 18

[Upload Code as File](#)☐ [Test against custom input](#)[Run Code](#)[Submit Code](#)

## Congrats, you solved this challenge!

✓ Test Case #0

✓ Test Case #3

✓ Test Case #6

✓ Test Case #9

✓ Test Case #1

✓ Test Case #4

✓ Test Case #7

✓ Test Case #10

✓ Test Case #2

✓ Test Case #5

✓ Test Case #8

✓ Test Case #11

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