

## Problem Statement

The professor is conducting a course on Discrete Mathematics to a class of  $N$  students. He is angry at the lack of their discipline, and he decides to cancel the class if there are fewer than  $K$  students present after the class starts.

Given the arrival time of each student, your task is to find out if the class gets cancelled or not.

## Input Format

The first line of the input contains  $T$ , the number of test cases. Each test case contains two lines.

The first line of each test case contains two space-separated integers,  $N$  and  $K$ .

The next line contains  $N$  space-separated integers,  $a_1, a_2, \dots, a_N$ , representing the arrival time of each student.

If the arrival time of a given student is a non-positive integer ( $a_i \leq 0$ ), then the student enters before the class starts. If the arrival time of a given student is a positive integer ( $a_i > 0$ ), the student enters after the class has started.

## Output Format

For each testcase, print "YES" (without quotes) if the class gets cancelled and "NO" (without quotes) otherwise.

## Constraints

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

## Note

If a student enters the class exactly when it starts ( $a_i = 0$ ), the student is considered to have entered before the class has 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,  $K = 3$ , i.e., the professor wants at least 3 students to be in class but there are only 2

who have arrived on time ( $-3$  and  $-1$ ), hence the class gets cancelled.

For the second test case,  $K = 2$ , i.e, the professor wants at least 2 students to be in class and there *are* 2 who have arrived on time (0 and  $-1$ ), hence the class does not get cancelled.