Problem A. New Max

Input file: standard input
Output file: standard output

Time limit: 1 second Memory limit: 256 megabytes

Kamal has an array of size N.

He can do at most K operations on it, in each operation, he can choose any element in the array and change its value to any other value X, $(1 \le x \le 400)$.

Kamal wants to know if he can make the maximum element in the new array equal to M.

Input

The first line of input will contain 3 integers N, M and K ($1 \le N \le 400$) ($0 \le K \le 400$) ($1 \le M \le 400$) which are the size of the array, the new maximum value and the number of operations.

The second line will contain n integers, the i_{th} one is a_i which is the i_th element in array a_i ($1 \le a_i \le 400$)

Output

For each test case, print "YES" if Kamal can make the maximum element equals to M, print "NO" otherwise.

Example

standard input	standard output
6 4 3	YES
1 5 3 4 2 6	