Problem J. Journey

Input file:	`standard input`
Output file:	`standard output`
Time limit:	2 seconds
Memory limit:	256 megabytes

There are n cells along a straight line numbered from 1 to n. Each cell i contains a number a_i. Initially, the player is in the cell number 1 with the number h_0 in his hand.

If the player is in a cell number p ($1 \le p \le n$) with a number h in hand, he can jump to the cell number $p + a_p$ or to the cell number $p + h$. It is forbidden to leave the field. After the jump, the new number in the player's hand is equal to the length of the last jump.

You have to calculate the number of paths from the cell 1 to the cell n. Two paths are considered different if their sets of visited cells are different. Print the answer modulo 998 244 353.

Input

The first line contains two integers n and h_0: the number of cells on the line and the number in the player's hand before the start of the path ($2 \le n \le 100\,000$; $1 \le h_0 \le n - 1$).

The second line contains n integers a_1, a_2, ..., a_n. Here, a_i is the number in i-th cell ($1 \le a_i \le n - 1$).

Output

Print a single integer: the number of different paths modulo 998 244 353.

Example

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