JB Wants to Earn Big Money

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	512 megabytes

JB has always wanted to make a lot of money, so recently he is addicted to stocks.

The trading rules of the stock market are as follows. Suppose there are n people who want to buy some shares while m people who want to sell some shares. Everyone will give a price.

The system will determine a final price x. For the people who want to buy some shares, if the price he gives is not lower than x, he will join the transaction. For the people who want to sell some shares, if the price he gives is not higher than x, he will join the transaction.

Now, JB gives you the price given by the people and the final price x. He wants you to tell him the number of people who can join the transaction.

Input

The first line contains three numbers n, m and x ($1 \leq n, m, x \leq 10^5$), denoting the number of two types of people and the final price determined by the system.

The second line contains n numbers $a_1, a_2, \ldots, a_n$ ($1 \leq a_i \leq 10^5$), denoting the price given by the people who want to buy some shares.

The third line contains m numbers $b_1, b_2, \ldots, b_m$ ($1 \leq b_i \leq 10^5$), denoting the price given by the people who want to sell some shares.

Output

One number, denotes the number of people who can join the transaction.

Example

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