Problem B

Combinations, Once Again

Input: Standard Input
Output: Standard Output
Time Limit: 2 Seconds

Given **n** objects you'd have to tell how many different groups can be chosen if **r** objects are taken at a time.

Input

Input consists of **100** test cases. Each test case begins with two integers **n (0 < n <= 50), m (0 <= m <= n)**. The next line will contain the labels (numbers in the range 1 to n) of the n objects you are to choose from. Two objects with the same label are considered equivalent. Then in the last line for that test case, you'd have **m** values for **r**. There will be a single space separating two consecutive numbers in a line. Input is terminated by a test case where **n=0**, you must not process this test case.

Output

For each test case, print the test case number. And for each query number **r**, print the number of different groups that can be formed if **r** objects are taken from the given **n** objects. You can assume that for all input cases, the output will always fit in a **64-bit** unsigned integer and **(0<=r<=n)**.

Sample Input	Output for Sample Input
5 2 1 2 3 4 5 2 1 4 1 1 2 3 4 2 0 0	Case 1: 10 5 Case 2: 6

Problemsetter: Monirul Hasan, Member of Elite Problemsetters' Panel