Protected Wall Sequences

There are N guarding posts on the Great Wall of China. However, there are only M posts where there are guards. We call a wall between two posts protected if the posts on each end have guards. A protected wall sequence is a non-expandable sequence of protected walls.

Write a program that gives the count of protected wall sequences.

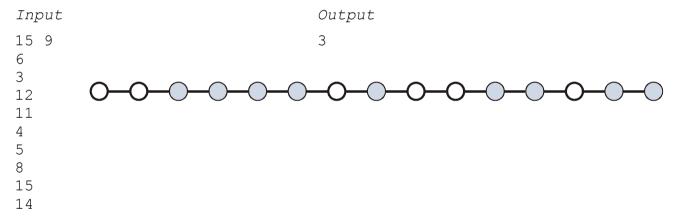
Input

The first line of the *standard input* contains the count of posts ($1 \le N \le 100$) and the count of posts with guards ($1 \le M \le 100$) separated by a space. The next M lines contain the ID of a post where there are guards. There is at most one guard on each post.

Output

The first line of the standard output should contain the count of protected wall sequences.

Example



Limits

Time limit: 0.1 second

Memory limit: 32 MB

Evaluation: In 40% of tests, the count of data is ≤ 20