**Java Top Coder: Challenge # 1**

**Context:**

Students of a Class 6A and 6B go on an excursion to a theme park. At the park, students line up for the Merry-go-round ride. The teacher asked students to stand in pairs and form a line. Children paired up with their friends and formed a line. Teacher found that the students are pairing up with the same set of children that they see in their class and wanted them to be paired up with someone from the other class.

The teacher arranged all the students in a line and assigned them a serial number. The first student was assigned ST1, second ST2 and so on till the end of the line.

Example:

Suppose there are 4 students. N = 4

The students were stood randomly in a line and were numbered as below

ST1 (6 A), ST2 (6 B), ST3 (6 B), ST4 (6 A)

The number of pairs where students are from the same class = 2 (K)

The number of pairs which can be made as per the teacher's wish = 4

Pair 1: Student ST1 and Student ST2. Both the students belong to the different classes.

Pair 2: Student ST1 and Student ST3. Both the students belong to the different classes.

Pair 3: Student ST4 and Student ST2. Both the students belong to the different classes.

Pair 4: Student ST4 and Student ST3. Both the students belong to the different classes.

**Problem statement:**

The teacher needs your help with this. Can you help teacher?

Note: There can be more than one pair of the same class.

Input Format

The first line of input consists of two space-separated integers, N and K

Next K lines each consists of the serial number of students of pairs of same classes.

Constraints

1<= N <=100, 1<= K <=50

Output Format

Print the required output in a separate line.

Sample Testcase 1

Input

5 2

1 3

5 4

Output

8

Explanation

Students ST1 and ST3 belong to the same class.

Students ST4 and ST5 belong to the same class.

The teacher wants to know the number of pairs of students belonging to different classes he can choose from.

There are 8 such pairs which can be made following the teacher's wish.

|  |  |  |
| --- | --- | --- |
| **Pair** | **Student 1** | **Student 2** |
| 1 | 1 | 2 |
| 2 | 1 | 4 |
| 3 | 1 | 5 |
| 4 | 2 | 3 |
| 5 | 2 | 4 |
| 6 | 2 | 5 |
| 7 | 3 | 4 |
| 8 | 3 | 5 |