dasha

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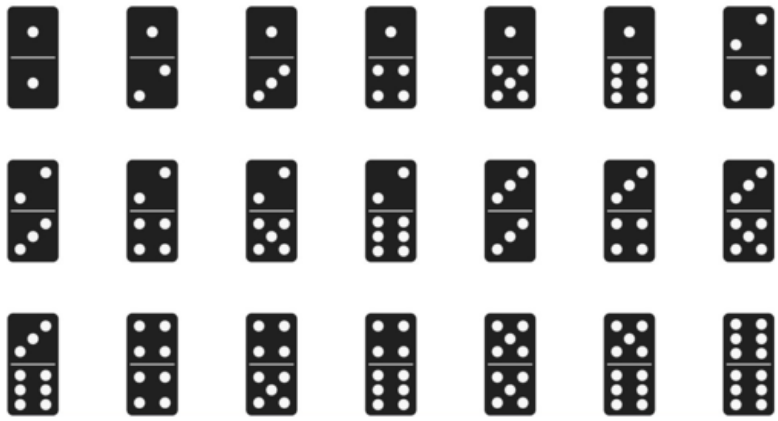
PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS HACKS ROOM STANDINGS CUSTOM INVOCATION

A. Anadi and Domino

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

Anadi has a set of dominoes. Every domino has two parts, and each part contains some dots. For every a and b such that $1 \leq a \leq b \leq 6$, there is exactly one domino with a dots on one half and b dots on the other half. The set contains exactly 21 dominoes. Here is an exact illustration of his set:



Also, Anadi has an undirected graph without self-loops and multiple edges. He wants to choose some dominoes and place them on the edges of this graph. He can use at most one domino of each type. Each edge can fit at most one domino. It's not necessary to place a domino on each edge of the graph.

When placing a domino on an edge, he also chooses its direction. In other words, one half of any placed domino must be directed toward one of the endpoints of the edge and the other half must be directed toward the other endpoint. There's a catch: if there are multiple halves of dominoes directed toward the same vertex, each of these halves must contain the same number of dots.

How many dominoes at most can Anadi place on the edges of his graph?

Input

The first line contains two integers n and m ($1 \leq n \leq 7, 0 \leq m \leq \frac{n \cdot (n-1)}{2}$) — the number of vertices and the number of edges in the graph.

The next m lines contain two integers each. Integers in the i-th line are a_i and b_i ($1 \leq a, b \leq n, a \neq b$) and denote that there is an edge which connects vertices a_i and b_i.

The graph might be disconnected. It's however guaranteed that the graph doesn't contain any self-loops, and that there is at most one edge between any pair of vertices.

Output

Output one integer which denotes the maximum number of dominoes which Anadi can place on the edges of the graph.

Examples

input Copy

```
4 4
1 2
2 3
3 4
4 1
```

output Copy

```
```

Dasha Code Championship - SPb Finals Round (only for onsite-finalists)

Finished

Practice

→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ Practice

You are registered for practice. You can solve problems unofficially. Results can be found in the contest status and in the bottom of standings.

→ Clone Contest to Mashup

You can clone this contest to a mashup.

Clone Contest

→ Submit?

Language: GNU G++11 5.1.0

Choose file: 选择文件 未选择任何文件

Be careful: there is 50 points penalty for submission which fails the pretests or resubmission (except failure on the first test, denial of judgement or similar verdicts). "Passed pretests" submission verdict doesn't guarantee that the solution is absolutely correct and it will pass system tests.

Submit

→ Problem tags

brute force graphs

No tag edit access

```
4
```

input Copy

```
7 0
```

output Copy

```
0
```

input Copy

```
3 1
1 3
```

output Copy

```
1
```

input Copy

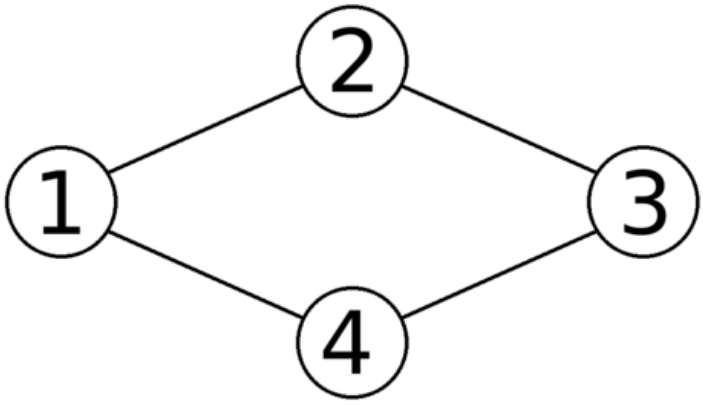
```
7 21
1 2
1 3
1 4
1 5
1 6
1 7
2 3
2 4
2 5
2 6
2 7
3 4
3 5
3 6
3 7
4 5
4 6
4 7
5 6
5 7
6 7
```

output Copy

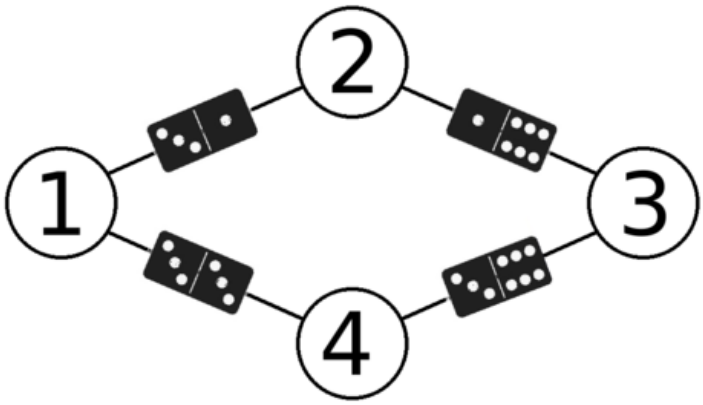
```
16
```

Note

Here is an illustration of Anadi's graph from the first sample test:



And here is one of the ways to place a domino on each of its edges:



Note that each vertex is faced by the halves of dominoes with the same number of dots. For instance, all halves directed toward vertex 1 have three dots.

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