Task name: shortest

Given is a simple graph with vertices: 1, 2, … , n. Write a program that outputs the minimum number of vertices, which have to be passed starting from vertex 1 to reach the vertex *n* (including in that number the first and the last vertex).

Input data: On the first row, the number of vertexes *n* and the number of edges *m* are given. On each of the following *m* rows, there are placed two integers that describe ends of an edge.

Constraints: $0 < n < 50$; $0 < m < 50$.

If there is no path from vertex 1 to vertex n, the program has to output 0.

Example input:

```
5 5
1 2
1 3
2 4
4 5
3 5
```

Output:

```
3
```