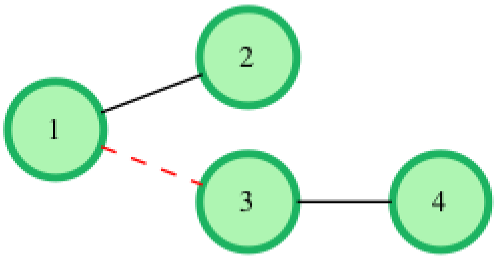
You are given a tree (a simple connected graph with no cycles).

Find the maximum number of edges you can remove from the tree to get a forest such that each connected component of the forest contains an even number of nodes.

As an example, the following tree with nodes can be cut at most time to create an even forest.



Function Description

Complete the evenForest function in the editor below. It should return an integer as described.

evenForest has the following parameter(s):

- t_nodes: the number of nodes in the tree
- t_edges: the number of undirected edges in the tree
- t_from: start nodes for each edge
- t_to: end nodes for each edge, (Match by index to t_from.)

Input Format

The first line of input contains two integers t_nodes and t_edges, the number of nodes and edges.

The next t_edges lines contain two integers t_from[i] and t_to[i] which specify nodes connected by an edge of the tree. The root of the tree is node 1.

Constraints

- 2 <= n <= 100
- n belongs to the set of positive even integers

Note: The tree in the input will be such that it can always be decomposed into components containing an even number of nodes.

Output Format

Print the number of removed edges.

Obs: exemplo de entrada para o problema D:

10 9

2 1

3 1

4 3

5 2

6 1

7 2

8 6

9 8

10 8

Saida:

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