Tree Diameter (CSES)

Time limit: 1.00 s/Memory limit: 512 MB

You are given a tree consisting of n nodes.

The diameter of a tree is the maximum distance between two nodes. Your task is to determine the diameter of the tree.

● Input

- The first input line contains an integer n: the number of nodes. The nodes are numbered $1,2,\ldots,n$.
- Then there are $n-1$ lines describing the edges. Each line contains two integers a and b: there is an edge between nodes a and b.

● Output

- Print one integer: the diameter of the tree.

● Constraints

- $1 \le n \le 2 \times 10^5$
- $1 \le a,b \le n$

範例輸入1	範例輸出1
5 6 1 2 1 3 3 4 3 5	3

Explanation: The diameter corresponds to the path $2 \rightarrow 1 \rightarrow 3 \rightarrow 5$.

reference: https://cses.fi/problemset/task/1131 (https://cses.fi/problemset/task/1131)