

Bandwidth

Time Limit: 1 Second
Memory Limit: 256 MB

Bandwidth measure the amount of data that can be transferred in a certain amount of time. The bandwidth of a path is the minimum bandwidth of all wires in the path. The University of Illinois campus can be viewed as a network with n vertices (buildings) connected by m edges (wires). As a technical staff, you are now asked to compute the minimum bandwidth for transferring data from any building to another in the network so that the university knows how to upgrade the network.

Input

The first line of input contains two integers n, m ($2 \leq n \leq 10^5$, $n - 1 \leq m \leq \min(10^5, \frac{n(n-1)}{2})$) - number of buildings and number of connections.

The next m lines describe the edges. Each line contains three integers u, v , and w ($1 \leq u, v \leq n$, $1 \leq w \leq 10^9$), denoting an undirected connection between building u and building v with bandwidth w . It is guaranteed that the graph is connected, and there are no self-loops or multiple edges.

Output

Output a single integer denoting the minimum bandwidth for transferring data from any building to another in the network.

Sample Inputs

4 6
1 2 1
1 3 2
2 3 3
1 4 5
2 4 1
3 4 1

Sample Outputs

2
