Problem K
Very Important Edge
Time limit: 3 seconds

You are given a simple connected graph where each edge is assigned a non-negative weight. Recall that a minimum spanning tree of a graph is a connected, acyclic subset of the edges of the graph with minimum total weight. Find an edge which maximizes the minimum spanning tree weight of a given graph if that edge is deleted. It is guaranteed that the input graph remains connected after deleting any one edge.

Input

The first line of input contains two integers n ($3 \leq n \leq 10^5$) and m ($3 \leq m \leq 10^6$), where n is the number of vertices and m is the number of edges in the input graph. The vertices are numbered from 1 to n.

Each of the next m lines contains three integers a, b ($1 \leq a < b \leq n$) and w ($1 \leq w \leq 10^6$). This denotes an edge between vertices a and b with weight w.

Output

Output a single integer, which is the minimum spanning tree weight of the input graph after the right edge is deleted.

Sample Input 1	Sample Output 1
3 3 1 2 1 2 3 2 1 3 2	4

Sample Input 2	Sample Output 2
4 5 2 3 5 1 2 2 1 3 4 1 4 2 3 4 3	10

Sample Input 3	Sample Output 3
5 7 2 5 8 1 3 19 4 5 9 1 5 15 1 2 14 3 4 16 2 4 15	54