

G. No refuel

time limit per test: 2 seconds?

memory limit per test: 256 megabytes

There are several roads between cities $1, 2, \dots, n$. The length of each road is known. The road network is connected, i.e., there is a path between any pair of cities. Gas stations are located only in the cities. You have to calculate what is the maximal distance that the car should be able to pass in order to have no problems driving between cities.

Input

The first line of the input contains two integers n and k ($1 \leq n \leq 1\,500$, $1 \leq k \leq 400\,000$) — the number of cities and the number of roads, respectively. Next k lines contain the description of the roads, one per line. A line contains the pair of cities connected by the road and the distance d_i between them ($0 \leq d_i \leq 10\,000$).

Output

The output should contain one integer — the longest distance the car should be able to pass without refuel.

Example

input	Copy
<pre>3 2 1 2 5 1 3 10</pre>	
output	Copy
<pre>10</pre>	

→ Submit?

Language: GNU G++20 13.2 (64 bit, win ▼

Choose file: Choose File No file chosen

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