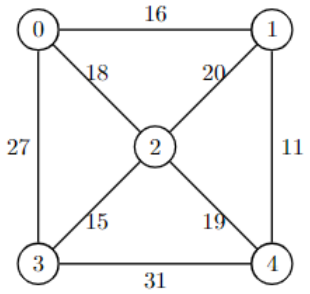
Power Grid

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

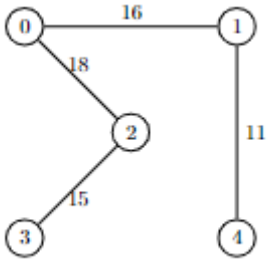
Meow works for a major electricity company. One of his many tasks is to plan the construction of power grids. For example, below is an undirected network consisting of 5 vertices and 8 edges with a total weight of 157. A vertex represents a transmission tower while an edge represents the cost to set up a power line between two towers.



The same network can also be represented as an edge list, such as the one below:

```
0 1 16
0 2 18
0 3 27
1 2 20
1 4 11
2 3 15
2 4 19
3 4 31
```

Meow's task is to optimize the network by removing some edges while still ensuring that all points on the network remains connected. The network above can be optimized and the network which achieves the maximum saving is shown below. It has a weight of 60, representing a saving of 157 – 60 = 97 from the original network.



Help Meow optimize networks given in edge list form and find its maximum saving achievable.

Input

The first line contains two integers, the number of vertices, N and the number of edges, E.

The next E lines contains 3 integers x, y, and z representing an undirected edge between x and y and their weight, z.

If there are edges between the same pair of vertices with different weight, they are to be considered as is, like multiple edges.

Constraints

$1 \leq N \leq 100$

$N - 1 \leq E \leq \frac{N*(N-1)}{2}$

$1 \leq x, y \leq N$

$0 \leq z \leq 10^5$

Output

Output the maximum saving achievable by removing unnecessary edges whilst ensuring the network remains connected.

Example

standard input	standard output
5 8 0 1 16 0 2 18 0 3 27 1 2 20 1 4 11 2 3 15 2 4 19 3 4 31	97