4 Spring Festival Roadmap

The town of Springvale is preparing for its annual Spring Festival, and the organizers want to design the optimal roadmap for visitors. The town consists of many locations to visit, and our roads are decorated for the occasion, so we have conveniently assigned a beauty score to each road between each location.

To ensure visitors see how truly beautiful our town is, we want to build a map that maximizes the total beauty score of roads while ensuring that every location is visited, AND every location is accessible from every other location.

4.1 Input

The first line contains two integers L and R, denoting the number of locations and roads, respectively. **Roads are bidirectional**

The next R lines contains three integers X, Y, and Z, each separated by a single whitespace.

Each line represents a road with a beauty score of Z between location X and location Y.

4.2 Output

Your output should be a single integer, representing the *maximum possible sum of beauty scores* possible while ensuring *ALL* locations are visited.

If it is not possible to visit all locations, then print -1.

4.3 Sample Input/Output

Sample Input 1	Sample Output 1
4 5	15
1 2 3	
2 3 4	
3 4 2	
4 1 6	
1 3 5	

Sample Input 2	Sample Output 2
5 3	-1
1 2 4	
2 3 3	
4 5 6	