# 1135. Connecting Cities With Minimum Cost

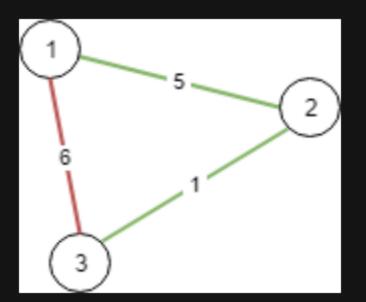
## Description

There are [n] cities labeled from [1] to [n]. You are given the integer [n] and an array [n] connections where [n] connections [n] indicates that the cost of connecting city [x] and city [y] (bidirectional connection) is [n] cost [n].

Return the minimum cost to connect all the n cities such that there is at least one path between each pair of cities. If it is impossible to connect all the n cities, return -1,

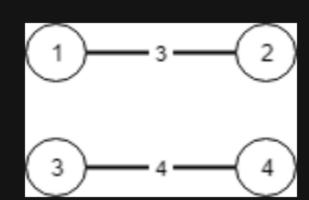
The **cost** is the sum of the connections' costs used.

#### Example 1:



```
Input: n = 3, connections = [[1,2,5],[1,3,6],[2,3,1]]
Output: 6
Explanation: Choosing any 2 edges will connect all cities so we choose the minimum 2.
```

#### Example 2:



```
Input: n = 4, connections = [[1,2,3],[3,4,4]]
Output: -1
Explanation: There is no way to connect all cities even if all edges are used.
```

### **Constraints:**

- 1 <= n <= 10 <sup>4</sup>
- 1 <= connections.length <=  $10^4$
- connections[i].length == 3
- $1 \ll x_i, y_i \ll n$
- x i != y i
- 0 <= cost i <= 10 <sup>5</sup>