

## Minimum Connection

Imagine a scenario where you're tasked with managing a network of interconnected points. Each connection in this network carries a specific cost. Your mission is to strategically choose a subset of these connections to ensure that all points remain connected while minimizing the total cost of the selected connections.

Input format:

The input consists of multiple test cases so the first line of the input is the number of test cases.

The first line of the custom input must contain two space-separated integers  $P$  denoting the number of points and  $E$  denoting the number of connections in the network. Next  $E$  lines contain three space-separated integers denoting each connection and cost  $C$  between the connections.

Output format:

Your objective is to output a single integer—the minimum possible sum of costs achievable while ensuring that all points remain connected through a strategic subset of connections for each test case.

Constraints:

$$1 \leq T \leq 30$$

$$1 \leq P \leq 10^4$$

$$1 \leq E \leq 10^5$$

$$1 \leq C \leq 10^6$$

It is guaranteed that the network is connected and doesn't contain self-loops & multiple connections.

Time Limit: 2 seconds

Example:

Input 1:

1

3 3

0 1 5

1 2 3

0 2 1

Output:

4