

Problem G. Just MST

Time limit 1000 ms
Memory limit 256MB

Problem Description

Given a connected, undirected graph with N nodes and M edges, each edge has a positive integer weight. The goal is to find the Minimum Spanning Tree (MST) of this graph, which is a subset of the edges that connects all nodes with the minimum possible total weight. Output the weight of this MST.

If there are no spanning trees, output -1.

Input format

The first line contains two integers, N and M ($1 \leq N, M \leq 2 \times 10^5$), where N is the number of nodes and M is the number of edges.

Each of the next M lines contains three integers u, v ($1 \leq u, v \leq n$), and w ($1 \leq w \leq 10^9$) representing an edge between nodes u and v with weight w .

Output format

Output a single integer, which is the total weight of the Minimum Spanning Tree of the graph.

If there are no spanning trees, output -1.

Subtask score

Subtask	Score	Additional Constraints
1	100	No constraints

Sample

Sample Input 1

```
5 7
2 5 6
2 4 6
1 2 10
4 1 12
1 3 14
5 4 17
3 2 17
```

Sample Output 1

```
36
```

Sample Input 2

```
3 4
2 3 8
1 2 20
1 3 9
2 1 9
```

Sample Output 2

```
17
```

Notes