

## SPOJ Problem Set

# 3188. Minimum Spanning Tree

### Problem code: MST

Find the minimum spanning tree of the graph.

#### Input

On the first line there will be two integers N - the number of nodes and M - the number of edges. ( $1 \leq N \leq 10000$ ), ( $1 \leq M \leq 100000$ )

M lines follow with three integers i j k on each line representing an edge between node i and j with weight k. The IDs of the nodes are between 1 and n inclusive. The weight of each edge will be  $\leq 1000000$ .

#### Output

Single number representing the total weight of the minimum spanning tree on this graph. There will be only one possible MST.

#### Example

**Input :**

```
4 5
1 2 10
2 3 15
1 3 5
4 2 2
4 3 40
```

**Output :**

```
17
```

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Added by:Nikola P Borisov