

Description

One day Mr. K gives you a recipe:

Section I Ingredients

- A weighted connected undirected graph G with n vertices and m edges
- Another graph T using same vertices with G but having no edge

Section II Procedure

1. Pick an edge e with smallest weight among unprocessed edges in graph G .
(If there are more than one such edges, pick any.)
2. If edge e forms an cycle along with the edges in graph T , throw edge e away.
Otherwise, add edge e into graph T .
3. Repeat step 1 and 2 until all edges in graph G are processed.
4. Finally, you construct a cool graph T !

You are so curious what this recipe is about. Luckily, you always bring a weighted connected undirected graph with you so you can start following the recipe right away. Please follow the instruction in the recipe to construct a cool graph (the T mentioned in the recipe) and output its total edge weight.

Input

The first line contains two integers n and m , being the number of vertex and the number of edges in your weighted undirected graph.

The following m lines describes the edges. Each line contains three integers u, v, w , denoting an undirected edge uv with weight w .

Constraints

- $1 \leq n \leq 2 \cdot 10^5$
- $1 \leq m \leq 10^6$
- $1 \leq w \leq 10^9$ for each edge

Output

Please print the answer in one line.

Sample Input 1

```
6 8
1 2 4
1 3 8
2 3 9
4 3 8
5 3 7
4 5 6
4 6 3
5 6 10
```

Sample Output 1

```
28
```

Hint

1. There may be multiple edges and self loops in the graph.
2. Be careful of overflow. Please use 64-bit integers to calculate weight sum.

Announcements

Submissions

Rankings

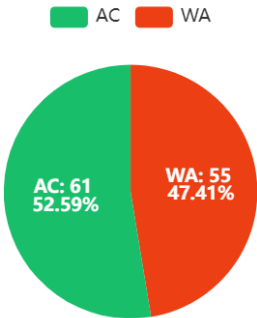
View Contest

Information

ID	
Time Limit	2000M
Memory Limit	256M
IO Mode	Standard I/O
Created By	ta_redre
Level	Hidden
Score	10
Tags	Short

Statistic

Detail



Language: C

Theme: Solarized Light

```
1
```

✔ You have solved the problem

⚙ Submit for Sample Test

✎ Submit

⚠ Contest has ended

Sample Test Input

```
6 8
1 2 4
1 3 8
2 3 9
4 3 8
5 3 7
4 5 6
4 6 3
5 6 10
```

Sample Test Output