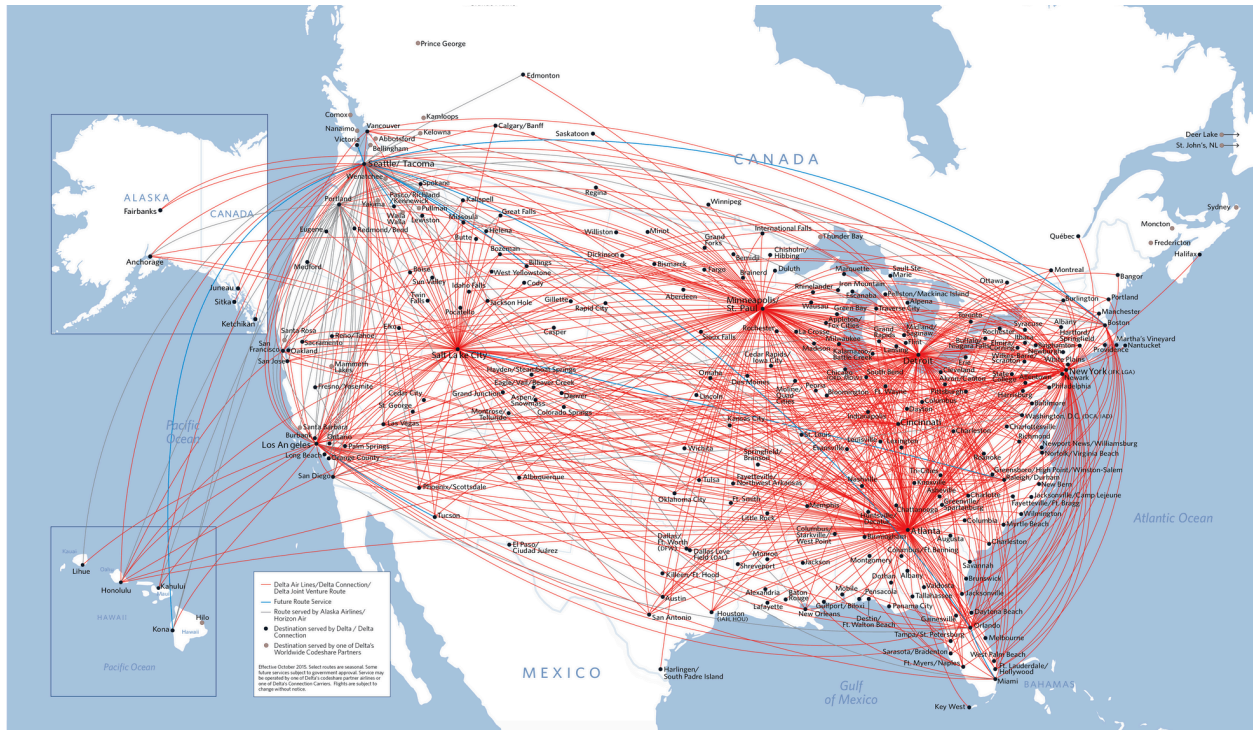


Hub-and-Spokes

Topic: Minimum Spanning Trees

Time Limit: 2s



Amidst global oil crisis, a spokesperson for the board of directors of **Alliance Airways™**, the biggest multicontinental airline company in the world, rushes to you house to discuss a very important matter.

Alliance Airways™ is in desperate need to cut flight routes and minimize oil consumption, whilst still needing to be able to serve every airport that **Alliance Airways™** already serve. This is due to their decades-long lease on those airports, which is unrefundable. To absolutely minimize cost, **Alliance Airways™** will be willingly venture towards this infamously-called **Hub-and-Spokes** flight route scheme until the crisis ends.

Upon arriving at your house, the spokesman for **Alliance Airways™** gave you the list of **Alliance Airways™** current flight route scheme in a file, which is formatted as such:

- The first line consists of **n** and **m**.
 - **n** is the number of airports that **Alliance Airways™** serves
 - **m** is the number of **Alliance Airways™** flight routes currently operational
- Then, the next **m** lines each consists of the details of each flight route, formatted as: **a1, a2, d**.
 - **a1** is the code for an airport connected by **Alliance Airways™**
 - **a2** is the code for another airport connected by **Alliance Airways™**
 - **d** is the distance between those **Alliance Airways™**-served airports

One thing to note about **Alliance Airways™** is they never create coach and or exclusive-transit routes. Every flight route they have is always round-trip.

The **Alliance Airways™** spokesman only need to know the total distance of every flight route remaining after **Alliance Airways™** uses the **Hub-and-Spokes** scheme. Should you succeed in giving the **Alliance Airways™** spokesman the numbers, **Alliance Airways™** will know how much should they pay for oil during the crisis and allocate their infrastructures efficiently.

Also, this should go without saying, but **Alliance Airways™** will absolutely pay you a very handsome reward.

Constraints:

- **1 < n ≤ 100005**
- **1 < m ≤ 100005th triangular number**
- **LLONG_MIN < a1, a2, d < LLONG_MAX**

Testcase 0

INPUT

```
9 16
0 2 12
0 1 8
1 2 13
1 4 9
1 3 25
3 4 20
2 3 14
2 6 21
3 6 12
6 8 11
3 8 16
8 7 9
3 7 12
3 5 8
5 7 11
4 5 19
```

OUTPUT

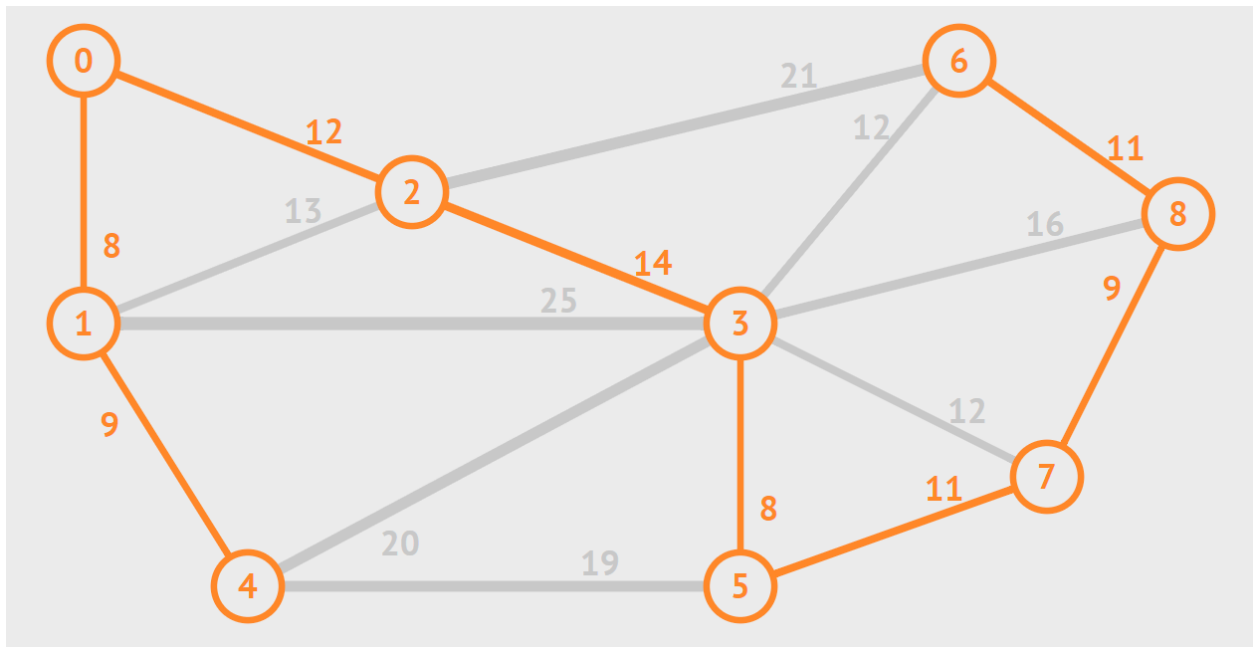
```
82
```

EXPLANATION

Below is the visualization of **Alliance Airways™** route.

The orange edges are the flight routes being maintained, and the greyed out edges are the flight routes to be discarded.

If we were to add all the weights of the orange edges, we will get **82**



As such, in this example, we can conclude that the total distance of every **Alliance Airways™** flight route after the **Hub-and-Spokes** scheme adoption is **82** units

*The story, all names, characters, and incidents portrayed in this production are fictitious. No identification with actual persons (living or deceased), places, buildings, corporate entities (notably **Alliance Airways™**), and or products is intended or should be inferred.*