

Judgement Day 1

Sam and Dean are hunters, but they don't hurt anything ordinary. They hunt supernatural creatures. Their target is a demon named Azazel who is hell bent to bring the world to its Apocalypse. But they won't let this happen, so they have an idea to set up a Demon's Trap.

Sam and Dean can make a Trap by travelling to all the churches through the roads. There is a connection of roads between all the churches. Each road takes some time to reach the other one. Since Azazel wasn't happy to hear about their plan, he is after them, but it'll take him T hours to reach them. You have to find out the shortest time in which Sam Dean can make the Demon's Trap or write -1 if Azazel gets to them first.

Input Format

Next line contains three numbers N, M and T denoting the number of churches, number of roads and time for Azazel to reach Sam and Dean respectively.

Next M lines contain three numbers U, V, W denoting two churches to be connected and the time taken by that road.

Constraints

- $1 \leq N \leq 100000$
- $0 \leq M \leq \min(100000, N*(N+1)/2)$
- $1 \leq U, V \leq N$
- $1 \leq W \leq 100000$
- $1 \leq T \leq 100000$

Output Format

Single line containing one number denoting the minimum time in with they can travel to all the churches or -1 Time taken by Azazel is less than or equal to time taken by sam and dean.

Sample Input 0

```
5 5 13
1 2 1
1 4 3
2 4 1
4 3 4
4 5 5
```

Sample Output 0

```
11
```

Sample Input 1

```
5 6 168
4 1 60
5 1 16
2 1 91
3 2 23
4 3 40
1 3 88
```

Sample Output 1

```
139
```