Q3 - Bellman-Ford Algorithm

This page is used for checking the format and correctness.

Input Format

The input command contains the directional graph information and the start node and the target node used for the shorted path calculation.
The first line contains two integers represent the number of nodes(m) and edges(n) in the graph.
The second line contains two integers for the shorted path calculation: the start node(s), and the target node(t).
After that, the following n lines represent the edge information. Each line contains three integers: start node(a), end node(b), and the cost(c).
In each line, all the integers will be separated by space.

Constraints

0 < m <= 1000
0 < n <= 3000
0 <= s, t, a, b < m
-10000 <= c <= 10000

Output Format

If there is no negative loop in the graph, please output one integer that represents the cost of the shortest path.
If there is a negative loop in the graph, please output the string "Negative loop detected!"

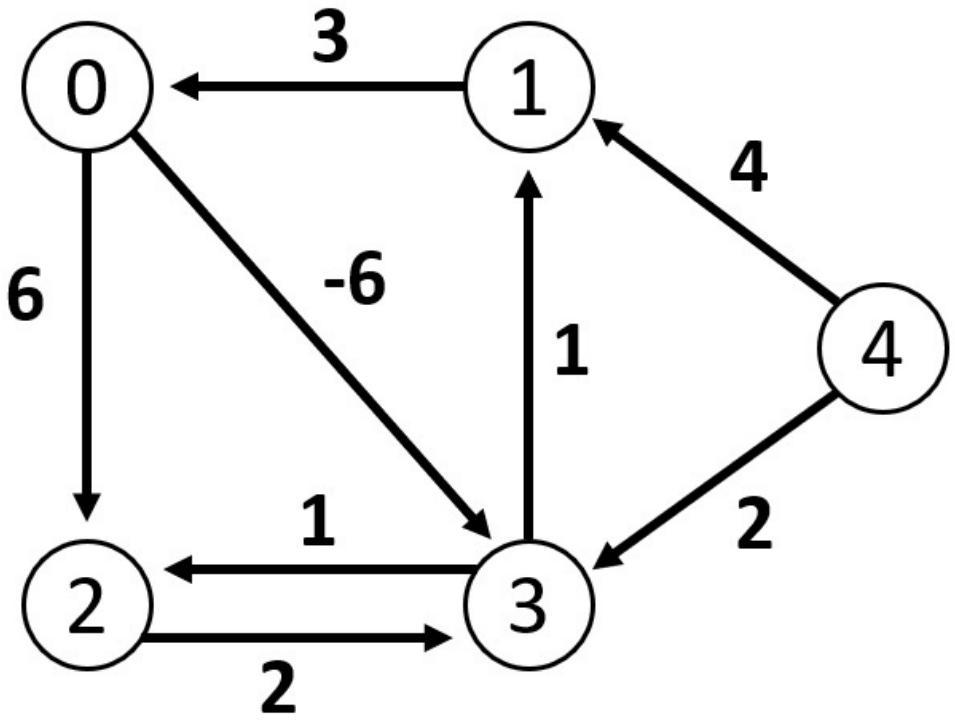
Sample Input 0

```
5 8
4 0
1 0 3
2 3 2
4 3 2
3 1 1
0 2 6
4 1 4
3 2 1
0 3 -6
```

Sample Output 0

```
Negative loop detected!
```

Explanation 0


0
1
2
3
4
3
4
6
-6
1
1
2
2