# **Exploring the maze**

## **English**

### <u>Vietnamese</u>

In a maze, there are N rooms and some corridors connecting the rooms. There is at most one corridor connecting each pair of rooms.

An explorer wants to explore that maze. He'll start at a room and go along all the corridors so that each corridor is passed exactly once. Then he'll return to the starting point. Each corridor is assigned a value c meaning that when going along that corridor, the explorer's energy points will be add up with c unit(s) (c may be negative). The explorer starts with 0 energy point. He'll die if after passing a corridor, his energy point is negative.

Your task is to help the explorer find a **safe** journey satisfying the given conditions.

## Input

- The first line contains two integers N and M ( $1 \le N \le 200$ ).
- The i<sup>th</sup> line in the next M lines contains three integers u, v, c representing a corridor connecting room u and room v with c energy points. (|c| ≤ 10000).

# Output

• If there is no safe journey, print -1. Otherwise, print M+1 integers which are indexes of the rooms along the journey.

# Example

#### Input

33

122 13-1

23-1

#### Output

2132