Problem 3 - I Want It All!!! (Programming) (13 points)

Problem Description

Xiao Feng and Baluteshih are learning graph theory together from **Waynetu**, a legendary grandmaster in graph theory. To make sure that they have good learning efficiency, **Waynetu** decided to assign homework to them. The homework is described as follow:

> Given a weighted connected undirected graph, please find a spanning tree of it.

Xiao Feng and Baluteshih are working on this homework together. Xiao Feng loves shortest-path trees, so he would like to find a shortest path tree starting from vertex 1. However, Baluteshih loves minimum spanning trees, so he would like to find a minimum spanning tree of the given graph. Please help Xiao Feng and Baluteshih to find a spanning tree that satisfies both of their preferences simultaneously or determine that it is impossible.

Input

The first line contains two integers N, M, describing the number of the vertices and the edges of the graph. The vertices are indexed from 1 to N.

In the next M lines, the i^{th} line contains three integers a_i, b_i, c_i, describing an undirected edge with index i which connects the vertices a_i and b_i with weight c_i.

It is guaranteed that the input forms a connected graph.

Test Group 0 (0 %)

- Sample Input.

Test Group 1 (40 %)

- $1 \leq N \leq 10^5$.
- $0 \leq M \leq 3 \times 10^5$.
- $1 \leq a_i, b_i \leq N, a_i \neq b_i$.
- $1 \leq c_i \leq 10^9$.
- All c_i are distinct.

Test Group 2 (60 %)

- $1 \leq N \leq 10^5$.
- $0 \leq M \leq 3 \times 10^5$.
- $1 \leq a_i, b_i \leq N, a_i \neq b_i$.
- $1 \leq c_i \leq 10^9$.

Output

If Xiao Feng and Baluteshih cannot find the same spanning tree of the input graph, please print "`No`" (without quotes) in the first line.

Otherwise, please print "`Yes`" (without quotes) in the first line. In the second line, please print $n-1$ integers, describing indices of the chosen edges of the spanning tree. If there are multiple choices of the spanning trees, you may print any of them.

Sample Input 1

```
5 6
1 2 1
1 3 2
2 5 3
2 4 4
1 5 5
3 4 6
```

Sample Output 1

```
Yes
1 2 3 4
```

Sample Input 2

```
7 9
5 7 3
3 2 4
1 4 18
3 4 17
2 5 10
1 5 49
1 3 35
3 5 14
6 5 19
```

Sample Output 2

```
Yes
1 2 3 4 5 9
```

Sample Input 3

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

Sample Output 3

```
No
```

Sample Input 4

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

Sample Output 4

```
Yes
1 2 4
```

Hint

1. You may want to find "a shortest-path tree that forms a minimum spanning tree" instead of finding "a minimum spanning tree that forms a shortest-path tree".
2. Test Group 1 can only help you verify the correctness of your shortest-path tree and minimum spanning tree. Try not to regard it as a hint for full credit.