During 2009 and 2010 ICPC world finals, the contest was webcasted via world wide web. Seeing this, some contest organizers from *Ajobdesh* decided that, they will provide a live stream of their contests to every university in *Ajobdesh*. The organizers have decided that, they will provide best possible service to them. But there are two problems:

1. There is no existing network between universities. So, they need to build a new network. However, the maximum amount they can spend on building the network is C.

2. Each link in the network has a bandwidth. If, the stream's bandwidth exceeds any of the link's available bandwidth, the viewers, connected through that link can't view the stream.

Due to the protocols used for streaming, a viewer can receive stream from exactly one other user (or the server, where the contest is organized). That is, if you have two 128kbps links, you won't get 256kbps bandwidth, although, if you have a stream of 128kbps, you can stream to any number of users at that bandwidth.

Given C, you have to maximize the minimum bandwidth to any user.

Input

First line of input contains $T (\leq 50)$, the number of test cases. This is followed by T test cases.

Each test case starts with an integer $N, M, C (1 \leq N \leq 60, 1 \leq M \leq 10^4, 1 \leq C \leq 10^9)$, the number of universities and the number of possible links, and the budget for setting up the network. Each university is identified by an integer between 0 and N-1, where 0 is the server.

Next M lines each contain 4 integers, $u, v, b, c (0 \leq u, v < N, 1 \leq b, c \leq 10^6, u \neq v)$, describing a possible link from university u to university v, that has the bandwidth of b kbps and of cost c. All links are unidirectional.

There is a blank line before each test case.

Output

For each test case, output the maximum bandwidth to stream. If it's not possible, output
"`streaming not possible.`".

Sample Input

Sample Input	Output for Sample Input
3	128 kbps
	256 kbps
3 4 300	streaming not possible.
0 1 128 100	
1 2 256 200	
2 1 256 200	
0 2 512 300	
3 4 500	
0 1 128 100	

```
1 2 256 200
2 1 256 200
0 2 512 300

3 4 100
0 1 128 100
1 2 256 200
2 1 256 200
0 2 512 300
```