

### Example 1

Input:

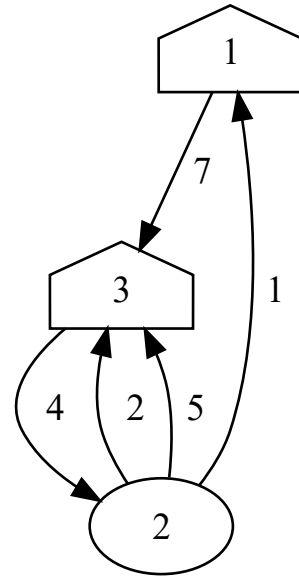
```

10 20
3 5
1 3 7
2 1 1
2 3 2
2 3 5
3 2 4
    
```

Output:

```

6
    
```



### Example 2

Input:

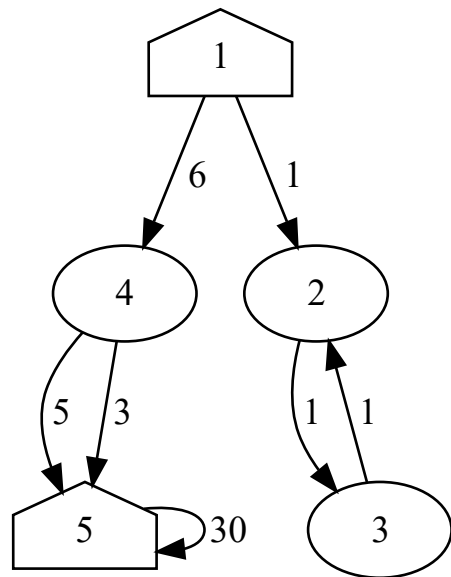
```

4 10
5 7
1 4 6
4 5 5
4 5 3
5 5 30
1 2 1
2 3 1
3 2 1
    
```

Output:

```

5
    
```



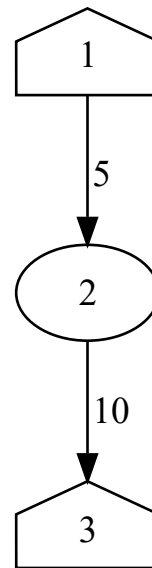
### Example 3

Input:

```
5 30
3 2
1 2 5
2 3 10
```

Output:

```
15
```



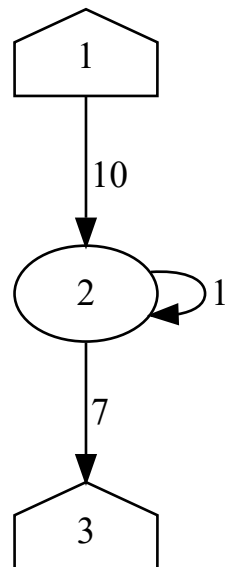
### Example 4

Input:

```
18 18
3 3
1 2 10
2 2 1
2 3 7
```

Output:

```
0
```



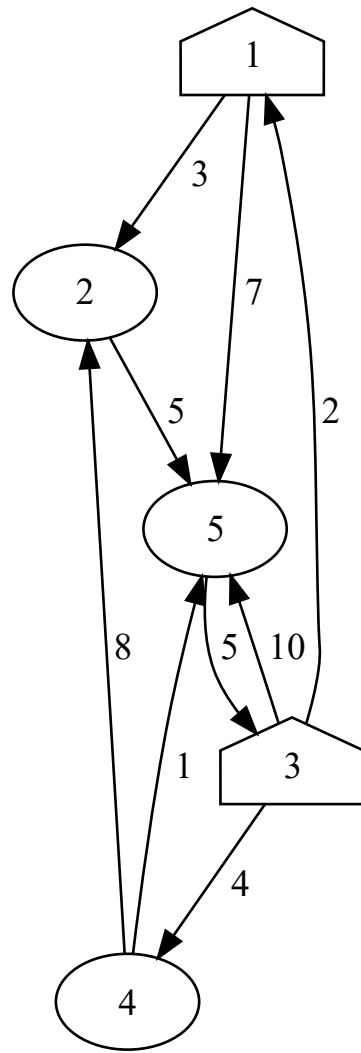
### Example 5

Input:

30 40
5 9
1 2 3
3 1 2
4 2 8
1 5 7
3 4 4
2 5 5
4 5 1
3 5 10
5 3 5

Output:

7
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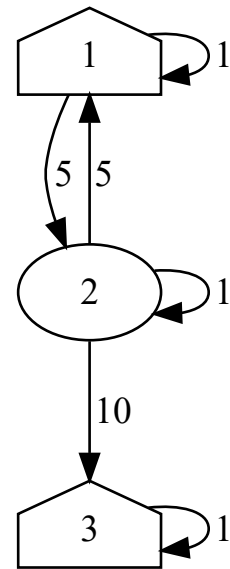
### Example 6

Input:

1 200
3 6
1 1 1
2 2 1
3 3 1
1 2 5
2 1 5
2 3 10

Output:

14
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Example 7

Input:

1	50
5	7
1	12
1	27
2	25
2	38
2	519
3	310
3	58

Output:

22
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