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Reward

Time Limit: 2000/1000 MS (Java/Others) Memory Limit: 32768/32768 K (Java/Others)
Total Submission(s): 15255 Accepted Submission(s): 4889

Problem Description

Dandelion's uncle is a boss of a factory. As the spring festival is coming , he wants to distribute rewards to his workers. Now he has a trouble about how to distribute the rewards.
The workers will compare their rewards ,and some one may have demands of the distributing of rewards ,just like a's reward should more than b's.Dandelion's unclue wants to fulfill all the demands, of course ,he wants to use the least money.Every work's reward will be at least 888 , because it's a lucky number.

Input

One line with two integers n and m ,stands for the number of works and the number of demands .($n \leq 10000, m \leq 20000$)
then m lines ,each line contains two integers a and b ,stands for a's reward should be more than b's.

Output

For every case ,print the least money dandelion 's uncle needs to distribute .If it's impossible to fulfill all the works' demands ,print -1.

Sample Input

```
2 1
1 2
2 2
1 2
2 1
```

Sample Output

```
1777
-1
```

Author

dandelion

Source

曾是惊鸿照影来

Recommend

yifenfei

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Hangzhou Dianzi University Online Judge 3.0

