Age of Moyu

时限1000MS 内存256MB

Mr.Quin love fish so much and Mr.Quin’s city has a nautical system,consisiting of N ports and M shipping lines.The ports are numbered 1 to N.Each line is occupied by a weitian.Each weitian has an identification number.

The i-th(1<=i<=M) line connects port ai and bi (ai ≠bi )bidirectionally,and occupied by ci weitian(At most one line between two ports).

When Mr.Quin only uses lines that are occupied by the same weitian, the cost is 1 xiangxiangji. Whenever Mr.Quin changes to a line that is occupied by a different weitian from the current line, Mr.quin is charged an additional cost of 1 xiangxiangji. In a case where Mr.quin changed from some weitian A's line to another weitian's line changes to weitian A's line again, the additional cost is incurred again.

Mr.Quin is now at port 1 and wants to travel to port *N* where live many fishes. Find the minimum required xiangxiangji.If Mr.Quin can’t travel to port N,

print -1.

数据范围:

2≤*N*≤105

0≤*M*≤2×105

1≤*ai*≤*N* (1≤*i*≤*M*)

1≤*bi*≤*N* (1≤*i*≤*M*)

1≤*ci*≤106 (1≤*i*≤*M*)

**Input**

**N M**

**a1 b2 c2**

**a2 b2 c3**

**.....**

**am bm cm**

**Output**

Print the minimum required cost. If Mr.Quin can’t travel to port N,print -1 instead

**Sample Input 1**

3 3

1 2 1

1 3 2

2 3 1

**Sample Output 1**

1

**Sample Input 2**

2 0

**Sample Output 2**

-1