**A) My assumptions.**

* Self-loop is counted as edges e.g (1,1)
* any input other than int in input1 is considered invalid input
* The valid input in input2 is in given format {{},{}} and input2[0][i] and input2[1][i] must contain integers else it is considered invalid input.
* Number of nodes start from 1.
* Number of edges cannot be more than the number of nodes.

**B) Please code in Python and ensure that if you copy and paste your code on https://www.programiz.com/python-programming/online-compiler/, it works.**

Yes, my code is working fine.

**C) Please ensure that your code accepts inputs exactly as given in the test example. This is extremely important.**

Yes, my code accepts inputs exactly as given in the test example.

**D) Please do tell us at least 4 unique positive test cases and at least 2 negative test cases you used.**

**Higher the number of unique cases, the better. A trivial sample test case is also given.**

Positive Test cases:

**Test case 1:**

input1: 4

input2: {{1,1,1},{2,3,4}}

output: 3

Reason: The Output is 3 since the following 3 lines can drawn ((1, 2), (1, 3), (1, 4)).

**Test case 2:**

Input1: 10

Input2: {{1,2,1,9,8,7,1},{2,1,3,4,9,1,7}}

Output: 5

Reason: The Output is 5 since the following 5 lines can drawn ((1, 2), (1, 3), (9, 4), (8, 9), (7, 1))

**Test case 3:**

Input1: 5

Input2: {{},{}}

Output: 0

Reason: The Output is 0 since the following 0 lines can drawn ()

**Test case 4:**

Input1: 5

Input2: {{1,1,1,5,5},{1,3,4,5,5}}

Output: 4

Reason: The Output is 4 since the following 4 lines can drawn ((1, 1), (1, 3), (1, 4), (5, 5))

Negative Test cases:

**Test case 1:**

Input1: 5

Input2: {{1,1,1,5,5},{1,3,4,5,0}}

Output: invalid input

Reason: The Output is invalid because edges are more then number of nodes or there is 0.

**Test case 2:**

Input1: 4

Input2: {{1,1,1,1},{1,2,3,400}}

Output: invalid input

Reason: The Output is invalid because edges are more then number of nodes or there is 0 or less then 0.

**Test case 3:**

input1 :abc

==============================================================================

Invalid input as your are giving improper input in input1 or in input2 or number of nodes are not equal to number of edges.

**Test case 4:**

input1 :4

input2 : abc

==============================================================================

Invalid input as your are giving improper input in input1 or in input2 or number of nodes are not equal to number of edges.

**Test case 5:**

Input1: 4

Input2: {{1,1,1,1},{1,2,3,-4}}

Output: invalid input

Reason: The Output is invalid because edges are more then number of nodes or there is 0 or less then 0.