```python
# The knows API is already defined for you.
# @param a, person a
# @param b, person b
# @return a boolean, whether a knows b
# def knows(a, b):

class Solution(object):
    def findCelebrity(self, n):
        """
        :type n: int
        :rtype: int
        """
        if n == 0:
            return -1

        candidate = 0
        for i in range(1,n):
            if knows(candidate,i):
                candidate = i
            i += 1    #find celebrity candidate

        for i in range(0,n): #need to be careful here with the range should be n instead of n-1.
Corner case: 0 does not know 1; 1 does not know 0.
            if i != candidate and (not knows(i, candidate) or knows(candidate, i)):
                return -1

        return candidate
```