

Akash and Akhil are playing a game. They have N balls numbered from 0 to $N - 1$. Akhil asks Akash to reverse the position of the balls, i.e., to change the order from say, $0,1,2,3$ to $3,2,1,0$. He further asks Akash to reverse the position of the balls N times, each time starting from one position further to the right, till he reaches the last ball. So, Akash has to reverse the positions of the ball starting from 0^{th} position, then from 1^{st} position, then from 2^{nd} position and so on. At the end of the game, Akhil will ask Akash the final position of any ball numbered K . Akash will win the game, if he can answer. Help Akash.

Input Format

The first line contains an integer T , i.e., the number of the test cases.
The next T lines will contain two integers N and K .

Output Format

Print the final index of ball K in the array.

Constraints

- $1 \leq T \leq 50$
- $1 \leq N \leq 10^5$
- $0 \leq K < N$

Sample Input

```
2
3 1
5 2
```

Sample Output

```
2
4
```

Explanation

For first test case, The rotation will be like this:
 $0\ 1\ 2 \rightarrow 2\ 1\ 0 \rightarrow 2\ 0\ 1 \rightarrow 2\ 0\ 1$
So, Index of 1 will be 2.