**Reverse Game**

https://d3keuzeb2crhkn.cloudfront.net/s3_pub/hr-avatars/20791764-b9ea-4720-bc8c-416ec41364c8/150x150.png**by [amititkgp](https://www.hackerrank.com/amititkgp)**

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Akash and Akhil are playing a game. They have  balls numbered from  to . 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  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  position, then from  position, then from  position and so on. At the end of the game, Akhil will ask Akash the final position of any ball numbered . Akash will win the game, if he can answer. Help Akash.

**Input Format**   
The first line contains an integer , i.e., the number of the test cases.   
The next  lines will contain two integers  and .

**Output Format**   
Print the final index in array.

**Constraints**   
   
 

**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 -> 2 1 0 -> 2 0 1 -> 2 0 1  
So, Index of 1 will be 2.

<https://www.hackerrank.com/challenges/reverse-game>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication1

{

class Program

{

static int revertir(int[] arr, int elem)

{

int i = 0, j = arr.Length - 1;

//string concat = "";

List<int> res = new List<int>();

while (i < j)

{

//concat += s[j].ToString() + s[i].ToString();

res.Add(arr[j]);

res.Add(arr[i]);

i++;

j--;

}

if (i == j)

{

//concat += s[i].ToString();

res.Add(arr[i]);

}

//Console.WriteLine(concat);

//Console.WriteLine(concat);

//return res.IndexOf(elem);

return res.IndexOf(elem);

}

static void Main(string[] args)

{

//Console.WriteLine(revertir("012345", '4'));

int t = int.Parse(Console.ReadLine());

while (t-- > 0)

{

int n, k;

string input = Console.ReadLine();

n = int.Parse(input.Split(' ')[0]);

k = int.Parse(input.Split(' ')[1]);

//string s = "";

//for (int i = 0; i < n; i++)

//{

// s += i.ToString();

//}

//Console.WriteLine(s);

List<int> lista = new List<int>();

for (int i = 0; i < n; i++)

{

lista.Add(i);

}

Console.WriteLine(revertir(lista.ToArray(), k));

}

Console.ReadLine();

}

}

}