**Day 29: Bitwise AND**

**Task**  
Given set S= {1, 2, 3, …., N}. Find two integers, A and B (where A<B), from set S such that the value of A&B is the maximum possible and also less than a given integer, K. In this case, & represents the bitwise AND operator.

**Input Format**

The first line contains an integer, T, the number of test cases.  
Each of the T subsequent lines defines a test case as 2 space-separated integers, N and K, respectively.

**Constraints**

* 1 < T < 103
* 2 < N < 103
* 2 < K < N

**Output Format**

For each test case, print the maximum possible value of A&B on a new line.

**Sample Input**

3

5 2

8 5

2 2

**Sample Output**

1

4

0