

Fibo Counting

Jojo just learnt how to call fibonacci number by using recursive function from his teacher. Now Jojo want to know, given integer N and M, count how many times function f(M) will be called if Jojo execute fibonacci recursion from f(N). Note that $f(1) = f(2) = 1$.

Format Input

The first line of the input will be T, the number of test cases. For each test case, there will be N and M, describing the original fibonacci function f(N) and the fibonacci function f(M) that Jojo wants to know the number of function call.

Format Output

For each test case, print "Case #X: Y" where X is the test case number (starts at 1) and Y is the answer.

Constraints

$1 \leq T \leq 200$

$1 \leq N \leq 15$

$1 \leq M \leq N$

Sample Input (standard input)	Sample Output (standard output)
5 5 4 10 2 10 1 15 1 15 15	Case #1: 1 Case #2: 34 Case #3: 21 Case #4: 233 Case #5: 1