Toggle bits given range

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Given a non-negative number N and two values L and R. The problem is to toggle the bits in the range L to R in the binary representation of N, i.e, to toggle bits from the rightmost Lth bit to the rightmost Rth bit. A toggle operation flips a bit 0 to 1 and a bit 1 to 0.

Input:
First line of input contains a single integer T which denotes the number of test cases. Then T test cases follows. First line of each test case contains three space separated integers N, L and R.

Output:
For each test case , print the number obtained by toggling bits from the rightmost Lth bit to the rightmost Rth bit in binary representation of N.

Constraints:
1<=T<=100
1<=N<=1000
1<=L<=R
L<=R<= Number of bits(N)

Example:
Input:
2
17 2 3
50 2 5
Output:
23
44