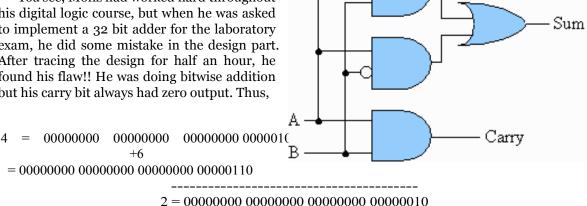
6+9=15 seems okay. But how come 4+6=2?

You see, Mofiz had worked hard throughout his digital logic course, but when he was asked to implement a 32 bit adder for the laboratory exam, he did some mistake in the design part. After tracing the design for half an hour, he found his flaw!! He was doing bitwise addition but his carry bit always had zero output. Thus,



Its a good thing that he finally found his mistake, but it was too late. Considering his effort throughout the course, the instructor gave him one more chance. Mofiz has to write an efficient program that would take 2 unsigned 32 bit decimal numbers as input, and produce an unsigned 32 bit decimal number as the output adding in the same was as his circuit does.

Input

In each line of input there will be a pair of integer separated by a single space. Input ends at EOF.

Output

For each line of input, output one line — the value after adding the two numbers in the 'Mofiz way'.

Sample Input

46

69

Sample Output

2

15

2 = 00000000 00000000 00000000 00000010

그가 마침내 자신의 잘못을 알게 된 것은 다행이지만, 이미 때는 늦었다. 과정 내내 그의 노력을 고려해, 강사는 그에게 한 번 더 기회를 주었다. 모피즈는 2개의 서명되지 않은 32비트 십진수를 입력으로 하는 효율적인 프로그램을 작성해야 하고, 같은 방법으로 출력물을 추가하는 것과 마찬가지로 서명되지 않은 32비트 십진수를 생성해야 한다.

입력 입력의 각 라인에는 하나의 공간으로 분리된 정수 한 쌍이 있을 것이다. 입력은 EOF에서 끝난다.

산출량

각 입력 라인에 대해 '모피즈 방식'으로 두 숫자를 추가한 후 한 라인 — 값을 출력한다.

샘플 입력

46

69

샘플 출력

2

15