

# Missing Integer [Amazon Python Interview Question]

Given an input list containing  $n$  distinct numbers in the range 0 to  $n$ , return the only number in the range that is missing from the list.

For example, given `input = [0, 1, 3]`, return `2`. Because the input list has 3 elements in it, we expect to see the numbers 0 to 3 in there, but 2 is missing.

Another example: given `input = [4, 3, 2, 1]`, return `0`. We return `0` because the input list has 4 elements in it, so we expect to see the numbers 0 to 4 in there, but 0 itself is missing!