Given an array containing *n* distinct numbers taken from 0, 1, 2, ..., n, find the one that is missing from the array.

**Example 1:**

**Input:** [3,0,1]

**Output:** 2

**Example 2:**

**Input:** [9,6,4,2,3,5,7,0,1]

**Output:** 8

**Note**:  
Your algorithm should run in linear runtime complexity. Could you implement it using only constant extra space complexity?