**Product of Array Except Self**

Given an array nums of *n* integers where *n* > 1,  return an array output such that output[i] is equal to the product of all the elements of nums except nums[i].

**Example:**

**Input:** [1,2,3,4]

**Output:** [24,12,8,6]

**Constraint:** It's guaranteed that the product of the elements of any prefix or suffix of the array (including the whole array) fits in a 32 bit integer.

**Note:**Please solve it **without division** and in O(*n*).

**Follow up:**  
Could you solve it with constant space complexity? (The output array **does not** count as extra space for the purpose of space complexity analysis.)