001-099

001. Length of a List

Given a list L, return length of it.

Example 1:

Input: L = [1, 2, 3, 4, 5, 6, 7]

Output: 7

Example 2: Input: L = [] **Output:** 0

002. Reverse a List

Given a list L, return a reversed list.

Example 1:

Input: L = [1, 2, 3, 4, 5, 6, 7]**Output:** [7, 6, 5, 4, 3, 2, 1]

Example 2: Input: L = []

Output: []

Example 3:

Input: L = [element]
Output: [element]

003. Maximum Value

Given a number A and a number B, return a maximum value.

Example 1:

Input: A = 10, B = 3

Output: 10

Example 2:

Input: A = 1, B = 7

Output: 7

Example 3:

Input: A = 2, B = 2

Output: 2

004. Maximum Value in a List

Given a list L of numbers, return a maximum value.

Example 1:

Input: L = [1, 7, 2, -3, 5, 0]

Output: 7

Example 2:

Input: L = [4]

Output: 4

Example 3:

Input: L = [-1, -9, -4]

Output: -1

Constraints:

• $1 \le \text{Length of } L$

005. Membership

Given an element X and a list L, return true if X is a member of L, false otherwise.

Example 1:

Input: X = alex, L = [bob, james, alan, alex, simon]

Output: true

Example 2:

Input: X = sam, L = [bob, james, alan, alex, simon]

Output: false

Example 3:

Input: X = 5, L = [1, 2, 3, 4, 5]

Output: true

Example 4:

Input: X = 0, L = [1, 2, 3, 4, 5]

Output: false

Example 5:

Input: X = 0, L = []

Output: false

006. Parity

Given an integer N, return atom even if the parity of N even, otherwise return atom odd.

Example 1: Input: N = 5 Output: odd

Example 2: Input: N = 8Output: even

007. List Length Parity

Given a list L, return atom even if the list's length parity is even, otherwise return atom odd.

Example 1:

Input: L = [1, 2, 3, 4, 5, 6, 7]

Output: odd

Example 2:

Input: L = [1, 2, 3, 4]

Output: even

008. Checking List Length Parity

Given a list L. Define two functions: **even_length** and **odd_length**, so that they return are true if their argument is a list of even or odd length respectively.

Example 1:

Input: L = [1, 2, 3, 4, 5, 6, 7]

Call: even_length(L)

Output: false

Call: odd_length(L)

Output: true

Example 2:

Input: L = [1, 2, 3, 4]Call: even_length(L)

Output: true

Call: odd_length(L)

Output: false

009. Sum of Elements in a List

Given a list L of numbers, return the sum of all elements in the list.

Example 1:

Input: L = [1, 2, 3, 4, 5, 6, 7]

Output: 28

Example 2: Input: L = []Output: 0

Example 3: Input: L = [12] **Output:** 12

Example 4:

Input: L = [10, 0, -5]

Output: 5

010. Removing Last 3 Elements in a List

Given a list L, return a list without 3 last elements.

Example 1:

Input: L = [1, 2, 3, 4, 5, 6, 7]

Output: [1, 2, 3, 4]

Example 2: Input: L = []Output: 0

Example 3:

Input: L = [sun, moon]

Output: []

Example 4:

Input: L = [jane, laura, jerry, katty]

Output: [jane]

011. Last Element

Given a list L, return the last element.

Example 1:

Input: L = [1, 2, 3, 4, 5, 6, 7]

Output: 7

Example 2:

Input: L = [sun, moon]

Output: moon

Example 3: Input: L = [1]

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Output: 1
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Example 4:

Input: L = [jane, laura, jerry, katty]

Output: katty

Constraints:

• $1 \le \text{Length of } L$

012. Deleting an Item

Given an item X and a list L, return a list in which the first occurrence of item X has been removed.

Example 1:

Input: X = 2, L = [1, 2, 3, 4, 5, 6, 7]

Output: [1, 3, 4, 5, 6, 7]

Example 2:

Input: X = elisa, L = [bob, mark, elisa, greg]

Output: [bob, mark, greg]

Example 3:

Input: X = 1, L = [1]

Output: []

013. Ordered List

Given a list L of numbers, return true if the list is ordered, false otherwise.

Example 1:

Input: L = [1, 2, 3, 4, 5, 6, 7]

Output: true

Example 2:

Input: L = [1, 2, 7, 5, 9]

Output: false

Example 3:

Input: L = [10] **Output:** true

Constraints:

• $1 \le \text{Length of } L$