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 <= 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 = 8
Output: 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