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

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]

Output: 1

Example 4:
Input: L = [jane, laura, jerry, katty]
Output: katty

Constraints:

- 1 <= 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 <= Length of L

014. Shift a List

Given a list **L**, return a list ‘shifted rotationally‘ by one element to the left**.**

Example 1:
Input: [1, 2, 3, 4, 5, 6, 7]
Output: [2, 3, 4, 5, 6, 7, 1]

Example 2:
Input: [1, 2, 7, 5, 9]
Output: [9, 1, 2, 7, 5]

Example 3:
Input: [sun]
Output: [sun]

Example 4:
Input: [ben, julia, antony]
Output: [antony, ben, julia]

015. Translate digits to words

Given a list **L** of numbers between 0 and 9, translate to a list of the corresponding words**.**

Example 1:
Input: [1, 2, 3, 4]
Output: [one, two, three, four]

Example 2:
Input: [7, 5, 9]
Output: [seven, five, nine]

Example 3:
Input: [6]
Output: [six]

016. Between

Given two integer numbers **N1**, **N2**, return the ordered list of all integers between **N1** and **N2**, **N1** <= N < **N2.**

Example 1:
Input: N1 = 2, N2 = 7
Output: [2, 3, 4, 5, 6]

Example 2:

Input: N1 = 0, N2 = 3
Output: [0, 1, 2]

Example 3:
Input: N1 = 9, N2 = 4
Output: []

017. Factorial

Given an integer number **N**, return the factorial of **N.**

Example 1:
Input: 0
Output: 1

Example 2:
Input: 5
Output: 120

Example 3:
Input: 8
Output: 40320

Constraints:

- 0 <= N