Python Truthy/Falsy Condition Cheat Sheet

Truthy / Falsy Values

In Python, the following values are considered Falsy:

- None
- False
- 0 (int, float)
- "" (empty string)
- [] (empty list)
- {} (empty dict)
- () (empty tuple)
- set() (empty set)

Any other value is considered Truthy.

Common Condition Patterns

if x: = True if x is not empty or None

if not x: = True if x is empty, None, or 0

if x is None: = True if x is exactly None

if x is not None:= True if x has any value

if x == []: = True if x is an empty list

if x != []: = True if x is not an empty list

if len(x) == 0: = Another way to check if x is empty

if len(x) > 0: = True if x has elements

In Loops

while x: = Continue looping while x has items

while stack: = Common in stack-based problems

while node: = Used in linked list and tree traversal

if not used[i]: = Used in backtracking (unused elements)

Examples in DSA

while node: node = node.next # Linked List

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if not root: return # Binary Tree base case

while queue: queue.popleft() # BFS using queue

while stack: stack.pop() # DFS using stack

if not nums: return 'No input' # Check for empty input

if node is None: return # Validate node