**Python list and string coding**

1. String Length Check

def check\_string\_length(s):

Check if string length is between 5 and 10 characters.

if not isinstance(s, str):

return False

return 5 <= len(s) <= 10

2. List Sum

def sum\_list(numbers):

Return sum of numbers in the list. Return 0 if list is empty.

if not isinstance(numbers, list):

return 0

return sum(numbers)

3. String Case Converter

def convert\_case(s):

Convert to upper if more uppercase, lower if more lowercase, else return original.

if not isinstance(s, str):

return s

upper = sum(1 for char in s if char.isupper())

lower = sum(1 for char in s if char.islower())

if upper > lower:

return s.upper()

elif lower > upper:

return s.lower()

return s

4. List Duplicate Remover

def remove\_duplicates(lst):

Remove duplicates from list, preserve order.

seen = set()

result = []

for item in lst:

if item not in seen:

seen.add(item)

result.append(item)

return result

5. String Word Counter

def count\_words(s):

Count the number of words in the string.

if not isinstance(s, str):

return 0

return len(s.strip().split())

6. List Even Numbers

def get\_even\_numbers(lst):

Return list of even numbers only.

if not isinstance(lst, list):

return []

return [num for num in lst if isinstance(num, int) and num % 2 == 0]

7. String Reverser

def reverse\_string(s):

Return reversed string.

if not isinstance(s, str):

return

return s[::-1]

8. List Element Counter

def count\_element(lst, element):

Count how many times an element appears in the list.

if not isinstance(lst, list):

return 0

return lst.count(element)

9. String Vowel Counter

def count\_vowels(s):

Count number of vowels in a string.

if not isinstance(s, str):

return 0

vowels = 'aeiou'

return sum(1 for char in s.lower() if char in vowels)

Bonus: Anagram Checker

def is\_anagram(s1, s2):

Check if two strings are anagrams of each other.

if not isinstance(s1, str) or not isinstance(s2, str):

return False

return sorted(s1.lower()) == sorted(s2.lower())