1. Write a Python program to find sum of elements in list?

def calculate\_sum(lst):

# Initialize a variable to hold the sum

total = 0

# Iterate over each element in the list and add it to the sum

for num in lst:

total += num

return total

# Example usage

numbers = [1, 2, 3, 4, 5]

result = calculate\_sum(numbers)

print("Sum of elements:", result)

1. Write a Python program to Multiply all numbers in the list?

def calculate\_product(lst):

# Initialize a variable to hold the product

product = 1

# Iterate over each element in the list and multiply it with the product

for num in lst:

product \*= num

return product

# Example usage

numbers = [1, 2, 3, 4, 5]

result = calculate\_product(numbers)

print("Product of numbers:", result)

1. Write a Python program to find smallest number in a list?

def find\_smallest\_number(lst):

# Check if the list is empty

if len(lst) == 0:

return None

# Assume the first element is the smallest

smallest = lst[0]

# Iterate over the remaining elements and update the smallest if a smaller number is found

for num in lst[1:]:

if num < smallest:

smallest = num

return smallest

# Example usage

numbers = [5, 2, 9, 1, 7]

result = find\_smallest\_number(numbers)

print("Smallest number:", result)

1. Write a Python program to find largest number in a list?

def find\_largest\_number(lst):

# Check if the list is empty

if len(lst) == 0:

return None

# Assume the first element is the largest

largest = lst[0]

# Iterate over the remaining elements and update the largest if a larger number is found

for num in lst[1:]:

if num > largest:

largest = num

return largest

# Example usage

numbers = [5, 2, 9, 1, 7]

result = find\_largest\_number(numbers)

print("Largest number:", result)

1. Write a Python program to find second largest number in a list?

def find\_second\_largest(lst):

# Check if the list has at least two elements

if len(lst) < 2:

return None

# Find the largest and second largest numbers

largest = max(lst)

lst.remove(largest)

second\_largest = max(lst)

return second\_largest

# Example usage

numbers = [5, 2, 9, 1, 7]

result = find\_second\_largest(numbers)

print("Second largest number:", result)

1. Write a Python program to find N largest elements from a list?

def find\_n\_largest(lst, n):

# Check if the list has enough elements

if len(lst) < n:

return None

# Sort the list in descending order

sorted\_lst = sorted(lst, reverse=True)

# Get the N largest elements

n\_largest = sorted\_lst[:n]

return n\_largest

# Example usage

numbers = [5, 2, 9, 1, 7, 3, 8]

n = 3

result = find\_n\_largest(numbers, n)

print(f"{n} largest elements:", result)

1. Write a Python program to print even numbers in a list?

def print\_even\_numbers(lst):

even\_numbers = [num for num in lst if num % 2 == 0]

for num in even\_numbers:

print(num)

# Example usage

numbers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

print("Even numbers:")

print\_even\_numbers(numbers)

1. Write a Python program to print odd numbers in a List?

def print\_odd\_numbers(lst):

odd\_numbers = [num for num in lst if num % 2 != 0]

for num in odd\_numbers:

print(num)

# Example usage

numbers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

print("Odd numbers:")

print\_odd\_numbers(numbers)

1. Write a Python program to Remove empty List from List?

def remove\_empty\_lists(lst):

return [sublist for sublist in lst if sublist]

# Example usage

my\_list = [1, [], [3, 4], [], 5, [], [6, 7, 8], []]

print("Original list:", my\_list)

filtered\_list = remove\_empty\_lists(my\_list)

print("List after removing empty lists:", filtered\_list)

1. Write a Python program to Cloning or Copying a list?

def clone\_list(original\_list):

return original\_list[:]

# Example usage

my\_list = [1, 2, 3, 4, 5]

cloned\_list = clone\_list(my\_list)

print("Original list:", my\_list)

print("Cloned list:", cloned\_list)

1. Write a Python program to Count occurrences of an element in a list?

def count\_occurrences(lst, element):

return lst.count(element)

# Example usage

my\_list = [1, 2, 3, 4, 1, 2, 1, 2, 1]

element = 1

occurrences = count\_occurrences(my\_list, element)

print("Occurrences of", element, "in the list:", occurrences)