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

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

sum\_of\_list = sum(my\_list)

print("The sum of elements in the list is:", sum\_of\_list)

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

Sol:- def multiply\_list(numbers):

result = 1

for num in numbers:

result \*= num

return result

# Example usage

my\_list = [2, 3, 5, 7]

product = multiply\_list(my\_list)

print(product) # Output: 210

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

sol:- def find\_smallest\_number(lst):

if len(lst) == 0:

return None

else:

smallest = lst[0]

for num in lst:

if num < smallest:

smallest = num

return smallest

# Example usage

my\_list = [10, 2, 3, 4, 5, 6, 7]

print("The smallest number in the list is:", find\_smallest\_number(my\_list))

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

Sol:- def find\_largest\_number(lst):

if len(lst) == 0:

return None

else:

largest = lst[0]

for num in lst:

if num > largest:

largest = num

return largest

# Example usage

my\_list = [10, 2, 3, 4, 5, 6, 7]

print("The largest number in the list is:", find\_largest\_number(my\_list))

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

Sol:- def find\_second\_largest(numbers):

"""

This function finds the second largest number in a list of numbers.

"""

largest = numbers[0]

second\_largest = None

for num in numbers[1:]:

if num > largest:

second\_largest = largest

largest = num

elif second\_largest is None or num > second\_largest:

second\_largest = num

return second\_largest

# Example usage:

numbers = [10, 20, 4, 45, 99, 32]

print("The second largest number in the list is:", find\_second\_largest(numbers))

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

Sol:- def find\_n\_largest\_elements(arr, n):

# Sort the array in descending order

arr.sort(reverse=True)

# Return the first n elements of the sorted array

return arr[:n]

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

Sol:- def print\_even\_numbers(my\_list):

"""

This function prints all even numbers in a list.

"""

even\_numbers = []

for num in my\_list:

if num % 2 == 0:

even\_numbers.append(num)

print("Even numbers in the list:", even\_numbers)

# Example usage

my\_list = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

print\_even\_numbers(my\_list)

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

Sol:- def print\_odd\_numbers(my\_list):

"""

This function prints all odd numbers in a list.

"""

odd\_numbers = []

for num in my\_list:

if num % 2 != 0:

odd\_numbers.append(num)

print("odd numbers in the list:", odd\_numbers)

# Example usage

my\_list = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

print\_odd\_numbers(my\_list)

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

Sol:- Method1:

new\_list = [lst for lst in original\_list if lst]

Method2:

new\_list = list(filter(lambda x: x != [], original\_list))

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

Sol:- # Using slicing operator

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

new\_list = original\_list[:]

# Using copy() method

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

new\_list = original\_list.copy()

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

Sol:- # create a sample list

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

# count the number of occurrences of 1

count = numbers.count(1)

# print the result

print("The number of occurrences of 1 is:", count)