**ANSWERS**

**Q1. Write a Python program to find sum of elements in list?**

**Ans.** Please find below the code to find sum of elements in list:

def sum\_of\_elements(lst):

total = sum(lst)

return total

my\_list = [int(x) for x in input("Enter the list elements separated by spaces: ").split()]

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

print(f"The sum of elements in the list is {result}")

**Q2. Write a Python program to Multiply all numbers in the list?**

**Ans.** Please find below the code to multiply all numbers in the list:

def multiply\_list(lst):

result = 1

for num in lst:

result \*= num

return result

my\_list = [int(x) for x in input("Enter the list elements separated by spaces: ").split()]

result = multiply\_list(my\_list)

print(f"The product of all numbers in the list is {result}")

**Q3. Write a Python program to find smallest number in a list?**

**Ans.** Please find below the code to find smallest number in a list:

def find\_smallest(lst):

smallest = min(lst)

return smallest

my\_list = [int(x) for x in input("Enter the list elements separated by spaces: ").split()]

result = find\_smallest(my\_list)

print(f"The smallest number in the list is {result}")

**Q4. Write a Python program to find largest number in a list?**

**Ans.** Please find below the code to find largest number in a list:

def find\_largest(lst):

largest = max(lst)

return largest

my\_list = [int(x) for x in input("Enter the list elements separated by spaces: ").split()]

result = find\_largest(my\_list)

print(f"The largest number in the list is {result}")

**Q5. Write a Python program to find second largest number in a list?**

**Ans.** Please find below the code to find second largest number in a list:

def find\_second\_largest(lst):

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

return sorted\_lst[1]

my\_list = [int(x) for x in input("Enter the list elements separated by spaces: ").split()]

result = find\_second\_largest(my\_list)

print(f"The second largest number in the list is {result}")

**Q6. Write a Python program to find N largest elements from a list?**

**Ans.** Please find below the code to find N largest elements from a list:

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

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

return sorted\_lst[:n]

my\_list = [int(x) for x in input("Enter the list elements separated by spaces: ").split()]

n = int(input("Enter the value of N: "))

result = find\_n\_largest(my\_list, n)

print(f"The {n} largest elements in the list are {result}")

**Q7. Write a Python program to print even numbers in a list?**

**Ans.** Please find below the code to print even numbers in a list:

def print\_even\_numbers(lst):

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

return even\_numbers

my\_list = [int(x) for x in input("Enter the list elements separated by spaces: ").split()]

result = print\_even\_numbers(my\_list)

print(f"The even numbers in the list are {result}")

**Q8. Write a Python program to print odd numbers in a List?**

**Ans.** Please find below the code to print odd numbers in a list:

def print\_odd\_numbers(lst):

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

return odd\_numbers

my\_list = [int(x) for x in input("Enter the list elements separated by spaces: ").split()]

result = print\_odd\_numbers(my\_list)

print(f"The odd numbers in the list are {result}")

**Q9. Write a Python program to Remove empty List from List?**

**Ans.** Please find below the code to remove empty list from list:

def remove\_empty\_lists(lst):

non\_empty\_lists = [sublist for sublist in lst if sublist]

return non\_empty\_lists

my\_list = [[], [1, 2], [], [3, 4], [], [5, 6]]

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

print(f"The list after removing empty lists: {result}")

**Q10. Write a Python program to Cloning or Copying a list?**

**Ans.** Please find below the code for cloning or copying a list:

def clone\_list(lst):

cloned\_list = lst.copy()

return cloned\_list

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

copied\_list = clone\_list(original\_list)

print(f"Original list: {original\_list}")

print(f"Copied list: {copied\_list}")

**Q11. Write a Python program to Count occurrences of an element in a list?**

**Ans.** Please find below the code to count occurrences of an element in a list:

def count\_occurrences(lst, element):

count = lst.count(element)

return count

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

element = int(input("Enter the element to count: "))

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

print(f"The element {element} occurs {result} times in the list")