Part (a) Obtain all the even numbers from a given list of integers.

def get\_even\_numbers(numbers): return [num for num in numbers if num % 2 == 0] # Example usage: numbers = [1, 2, 3, 4, 5, 6] print(get\_even\_numbers)

Part b Display the multiplication table of a given number from 1 to 12

def multiplication table(number): for I in range (1, 13): print(f"{number} x {i} = {number \* i}") # Example usage: multiplication table (5)

Part (c) Find the largest number in a list of integers.

def find largest(numbers): largest = numbers [0] for num in numbers: if num > largest: largest = num return largest # Example usage: numbers = [10, 20, 4, 45, 99] print (find largest(numbers)) # Output: 99

Part d Determine if a given string is a palindrome.

def is palindrome(s): return s == s [: -1] # Example usage: string = "madam" print(is palindrome(string)) # Output: T