```
In [4]: |
        #Python program to print all positive numbers in a range
        start = -10 # Start of the range
        end = 10 # End of the range
        print("Negative numbers in the range from", start, "to", end, "are:")
        for num in range(start, end +1): # We use `end + 1` to include the end value in the
            if num < 0:
                print(num)
        Negative numbers in the range from -10 to 10 are:
        -10
        -9
        -8
        -7
        -6
        -5
        -4
        -3
        -2
        -1
In [ ]:
        #Remove multiple elements from a list in Python
In [5]:
        my_list = [1, 2, 3, 4, 5, 6]
        elements_to_remove = [2, 4, 6]
        my_list = [x for x in my_list if x not in elements_to_remove]
        print(my_list)
        [1, 3, 5]
In [ ]:
In [7]: #write a Python program to Remove empty List from List
        my_list = [1, [], [3, 4], [], [5, 6], [], []]
        # Using list comprehension to remove empty lists
        my_list = [sublist for sublist in my_list if sublist]
        print("List after removing empty lists:", my_list)
        List after removing empty lists: [1, [3, 4], [5, 6]]
In [ ]:
        #write a Python program to Cloning or Copying a list
In [8]:
        original_list = [1, 2, 3, 4, 5]
        copied_list = list(original_list)
        # Modify the copied_list
        copied_list.append(6)
        print("Original list:", original_list)
        print("Copied list:", copied_list)
        Original list: [1, 2, 3, 4, 5]
        Copied list: [1, 2, 3, 4, 5, 6]
In [ ]:
```

```
In [9]:
         #write a Python program to Count occurrences of an element in a list
         my_list = [1, 2, 2, 3, 4, 2, 5, 2]
         element_to_count = 2
         # Count the occurrences of the element using the count() method
         count = my_list.count(element_to_count)
         print(f"The element {element to count} appears {count} times in the list.")
         The element 2 appears 4 times in the list.
In [ ]:
         #write a Python program to Remove empty tuples from a list
In [10]:
         my_list = [(1, 2), (), (3, 4), (), (5, 6), ()]
         # Using list comprehension to remove empty tuples
         my_list = [tpl for tpl in my_list if tpl]
         print("List after removing empty tuples:", my_list)
         List after removing empty tuples: [(1, 2), (3, 4), (5, 6)]
In [ ]:
         #write a Python program to Program to print duplicates from a list of integers
In [11]:
         my_list = [1, 2, 2, 3, 4, 4, 5, 6]
         # Using a set to find duplicates
         seen = set()
         duplicates = set()
         for num in my_list:
             if num in seen:
                 duplicates.add(num)
             else:
                 seen.add(num)
         print("Duplicates in the list are:", list(duplicates))
         Duplicates in the list are: [2, 4]
In [ ]:
         #write a Python program to find Cumulative sum of a list
In [12]:
         my_list = [1, 2, 3, 4, 5]
         # Initialize a variable to store the cumulative sum
         cumulative sum = []
         total = 0
         # Calculate the cumulative sum and store it in cumulative sum
         for num in my_list:
             total += num
             cumulative_sum.append(total)
         print("Cumulative sum of the list:", cumulative_sum)
         Cumulative sum of the list: [1, 3, 6, 10, 15]
In [ ]:
```

```
#write a Python program to Sum of number digits in List
In [13]:
         my_list = [123, 45, 6789, 12]
         # Function to calculate the sum of digits of a number
         def sum_of_digits(number):
             total = 0
             while number > 0:
                  digit = number % 10
                 total += digit
                 number //= 10
             return total
         # Calculate the sum of digits for each number in the list
         digit_sums = [sum_of_digits(num) for num in my_list]
         print("Sum of digits in the list:", digit_sums)
         Sum of digits in the list: [6, 9, 30, 3]
In [ ]:
In [14]: |
         #write a Python program to Break a list into chunks of size N
         def chunk_list(input_list, chunk_size):
             # Use list comprehension to break the input list into chunks of size N
             return [input_list[i:i + chunk_size] for i in range(0, len(input_list), chunk_size)
         my_list = [1, 2, 3, 4, 5, 6, 7, 8, 9]
         chunk_size = 3
         # Call the chunk_list function to break my_list into chunks of size chunk_size
         chunks = chunk_list(my_list, chunk_size)
         print("List broken into chunks of size", chunk size, ":", chunks)
         List broken into chunks of size 3 : [[1, 2, 3], [4, 5, 6], [7, 8, 9]]
In [ ]:
In [15]: |
         #write a Python program to Sort the values of first list using second list
         first_list = [3, 1, 2]
         second_list = ['C', 'A', 'B']
         # Combine the two lists into tuples and sort based on the second list
         sorted_lists = sorted(zip(second_list, first_list))
         # Extract the sorted values from the result
         sorted_first_list = [value for _, value in sorted_lists]
         print("Sorted first list based on the second list:", sorted_first_list)
         Sorted first list based on the second list: [1, 2, 3]
In [ ]:
```