

# Python Program to Sort a List in Ascending Order

```
#Description:
#   This program demonstrates how to sort a list of numbers
#   using Python's built-in `sort()` method.
# -----

def sort_list(numbers):
    """
    Sorts a list of numbers in ascending order.

    Parameters:
        numbers (list): A list of integers or floats

    Returns:
        list: A new sorted list in ascending order
    """
    # Use the built-in sorted() function (does not change original
    list)
    sorted_numbers = sorted(numbers)

    # Alternatively, use numbers.sort() to sort in-place (changes
    original list)
    # numbers.sort()
    # return numbers

    return sorted_numbers

# --- Main code execution ---

# Example list
my_list = [45, 12, 78, 3, 22, 5]

print("Original List:", my_list)

# Call the function to sort
sorted_list = sort_list(my_list)

print("Sorted List:", sorted_list)

Original List: [45, 12, 78, 3, 22, 5]
Sorted List: [3, 5, 12, 22, 45, 78]
```

# Create 3 Lists and Add Them to a Main List Using Loops

```
def create_main_list(n):  
    """  
    Creates a main list that contains 3 sublists:  
    1st sublist with i*1, 2nd with i*2, 3rd with i*3  
  
    Parameters:  
        n (int): Number of elements in each sublist  
  
    Returns:  
        list: A list containing 3 sublists  
    """  
    main_list = []  
  
    list1 = []  
    list2 = []  
    list3 = []  
  
    for i in range(1, n + 1):  
        list1.append(i * 1)  
        list2.append(i * 2)  
        list3.append(i * 3)  
  
    main_list.append(list1)  
    main_list.append(list2)  
    main_list.append(list3)  
  
    return main_list  
  
# --- Main Execution ---  
  
num = int(input("Enter number of elements in each sublist: "))  
result = create_main_list(num)  
  
print("\nMain List with 3 sublists:")  
for i, sublist in enumerate(result, start=1):  
    print(f"List {i}: {sublist}")  
  
Enter number of elements in each sublist: 2  
  
Main List with 3 sublists:  
List 1: [1, 2]  
List 2: [2, 4]  
List 3: [3, 6]
```