Task 1 : Sort a List of Integers in Descending Order
Write a Dart program that sorts a list of integers in descending order.

- Hint: You can use the List.sort() method and pass a custom comparator to achieve descending order.
- Output : [9, 7, 5, 3, 1]

Task 2 : Remove Duplicates from a List Using a Set
Write a Dart program that removes duplicate elements from a list by converting it to a set.

- Hint: A Set automatically removes duplicates.
- Output: [1, 2, 3, 4, 5]

Task 3 : Count Occurrences of Each Character in a String
Write a Dart program that counts the occurrences of each character in a given string and stores the result in a map.

- Hint: You can iterate over the string and use a map where the key is the character, and the value is the frequency.
- Output: {a: 3, b: 2, c: 1}

Task 4 : Merge Two Lists into a Single List
Write a Dart program that merges two lists into one. The merged list should include all the elements from both lists.

- Hint: You can use the addAll() method to merge two lists.
- Output: [1, 2, 3, 4, 5, 6]

Task 5 : Find Intersection of Two Sets
Write a Dart program that finds the intersection of two sets. The intersection should contain only the elements that are present in both sets.

- Hint: Use the Set.intersection() method to find common elements.
- Output: {3, 4}

Task 6 : Remove Elements from a List Based on Another List
Write a Dart program that removes elements from one list that appear in another list.

- Hint: Use the removeWhere() method to filter out the elements.
- Output : [1, 2, 4, 6]

Task 7 : Flatten a List of Lists
Write a Dart program that flattens a list of lists into a single list. For example, flatten [[1, 2], [3, 4], [5]] into [1, 2, 3, 4, 5].

- Hint: You can use the expand() function to flatten a list of lists.
- Output: [1, 2, 3, 4, 5]

Task 8 : Find Missing Numbers in a Range
Write a Dart program that finds the missing numbers in a given range. For example, in the list [1, 2, 3, 5], the missing number is 4.

- Hint: Use a Set to calculate the difference between the expected range and the given numbers.
- Output: [4]

Task 9 : Create a Map of Character Frequencies in a String
Write a Dart program that creates a map of character frequencies in a given string.

- Hint: You can iterate over the string and update the map for each character.
- Output: {a: 3, b: 2, c: 1}

Task 10 : Create a List and Print Even Numbers Only
Write a Dart program that takes a list of integers and prints only the even numbers from the list.

- Hint: You can use the where() method to filter out the even numbers.
- Output: [2, 4, 6, 8]

Task 11 : Create a Set and Find Union of Two Sets

Write a Dart program that finds the union of two sets, meaning all unique elements from both sets combined.

- Hint: You can use the union() method to combine two sets.
- Output : {1, 2, 3, 4, 5, 6}

Task 12 : Create a Map and Print Keys with Their Corresponding Values

Write a Dart program that creates a map of key-value pairs and prints each key with its corresponding value.

- Hint: You can loop through the map using forEach() to print the key-value pairs.
- Output: Name: Alice , Age: 30 , City: New York

Task 13 : Find the Maximum Number in a List

Write a Dart program that finds and prints the maximum number in a list of integers.

- Hint: Use the reduce() method to compare all the elements and find the maximum.
- Output: 9

Task 14 : Check if a Set Contains an Element

Write a Dart program that checks whether a set contains a specific element.

- Hint: Use the contains() method to check if an element exists in the set.
- Output: true

Task 15 : Difference Between Two Sets

Write a Dart program that finds the difference between two sets, i.e., the elements that are in the first set but not in the second.

- Hint: Use the difference() method to find the difference between two sets.
- Output: {1, 2}

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Task 16 : **Create a Set and Find Union of Two Sets**

Write a Dart program that finds the union of two sets, meaning all unique elements from both sets combined.

- Hint: You can use the union() method to combine two sets.
- Output : {1, 2, 3, 4, 5, 6}

Task 17 : **Convert a List to a Set**

Write a Dart program that converts a list with duplicate values into a set to remove the duplicates.

- Hint: Use Set.from() to convert a list into a set.
- Output: {1, 2, 3, 4, 5}

Task 18 : **Convert a Set Back to a List**

Write a Dart program that converts a set back into a list.

- Hint: Use the toList() method to convert a set into a list.
- Output: [1, 2, 3, 4, 5]

Task 19 : **Update and Remove Key-Value Pairs in a Map**

Write a Dart program that creates a map with product names as keys and their prices as values.
- *Update the price of a specific product.*
- *Remove another product from the map based on its name.*
- *Finally, print the updated map after both operations.*

- Hint: Use the **map[key] = newValue** to update a value and use the **remove()** method to delete a key-value pair.
- Output: {Apple: 3.0, Banana: 1.2, Cherry: 3.0}