Set Assignment_1

- 1. Create a Python Program to Find the size of a Set in Python.
- 2. Write a code to Iterate over a set in Python.
- 3. Write a Python Program to find Maximum and Minimum in a Set.

Example:

Input: set = ([8, 16, 24, 1, 25, 3, 10, 65, 55])

Output: max is 65

4. Write a Python Program to Remove items from Set.

Examples:

Input: set([12, 10, 13, 15, 8, 9])

Output: {9, 10, 12, 13, 15} {10, 12, 13, 15} {12, 13, 15} {13, 15} {15} set()

5. Write a Python Program to Check if two lists have at-least one element common.

Example:

Input : a = [1, 2, 3, 4, 5]

b = [5, 6, 7, 8, 9]

Output: True

False

6. Write a Python program to find common elements in three lists using sets.

Example:

Input: ar1 = [1, 5, 10, 20, 40, 80] ar2 = [6, 7, 20, 80, 100] ar3 = [3, 4, 15, 20, 30, 100]

70, 80, 1201

Output: [80, 20]

7. Write a Python code to Find missing and additional values in two lists.

Examples:

Input : list1 = [1, 2, 3, 4, 5, 6]

list2 = [4, 5, 6, 7, 8]

Output: Missing values in second list: {1, 2, 3}

Additional values in second list: {7, 8}

Missing values in first list: {7, 8}

Additional values in first list: {1, 2, 3}

8. Write a Python Program to find Difference between two lists.

Examples:

Input:
$$list1 = [10, 15, 20, 25, 30, 35, 40]$$

$$list2 = [25, 40, 35]$$

Output: [10, 20, 30, 15]

Explanation : resultant list = list1 - list2

9. Write a Python Program to Set difference for finding lost element from a duplicated array.

Example:

Input:
$$A = [1, 4, 5, 7, 9] B = [4, 5, 7, 9]$$

Output: [1]

1 is missing from second array

10. Write a Python program to count number of vowels using sets in given string.

Example:

Input: Learnbay

Output: No. of vowels: 3