

# SETS

## Practice Questions

1. Write a Python program to remove an item from a set if it is present in the set. Here Both Item and Set is enter by the User.

2. A. Python Program that Display which Letters are in the First String but not in the Second.

B. Python Program that Displays which Letters are in the Two Strings but not in Both

3. Program to get all subsets of given size of a set

Input : {1, 2, 3}, n = 2

Output : [{1, 2}, {1, 3}, {2, 3}]

4. Program to find all elements of a set2 which are not present in set1 using Set Comprehension.

Input : s1 = {1,2,3} s2 = {2,1,5,6,}

Output :{1, 2}

5. Write program to find maximum product of two integers in a given set.

I/p: s = {10,3,5,7}

O/p: The maximum product is formed by the pair is: {10,7}

6. Program to find minimum no of moves to swap the elements.

Here N is no of elements in a set.

Input: N=4, S={3,2,1,4}

Output: 2

7. Program to get all the strings which contains all vowels

I/p=> s = {'have','a','good','day','xyz','pqr'}

O/p=> {'have','a','good','day'}

8. Python Program to find common elements in three list using sets.  
9. Program to print the sum of maximum and minimum in a given Set.  
10. Program to check entered subset is present in a given set or not.

I/p: s = {2,5,1} s2 = {3,4,2,6,0,1,5}

O/p: YES

11. Python program to find the decimal of all the items in given set after flipping the bits (firstly convert decimal to binary) .

I/p: s = {1,2,3}

O/p: {6,5,4}

12. Program to create a set whose are the multiple of **x** and present in **set1** and **set2** but not in both sets. Here **x** is any positive integer entered by user.

I/P : x=2

set1={4,7,10,5,1} set2 = {4,10,2,6,1,9}

o/p: {2,6}

13. Program to check the elements of entered string are present in the items of the entered set. Also print the elements.

I/p: X = 'ab' S={'ab', 'bc', 'pqr', 'bcad'}

O/p: YES

{'ab', 'bcad'}

14. Program to count the words consist duplicate letters in a given set. Also remove or discard those elements from a given set which consist duplicate letter.

I/p: S={'Have', 'a', 'good', 'day'}

O/p: 3

S={'Have', 'a', 'day'}

15. Entered a set (**S**) of list. Where list consist integer numbers.

Write a program to print a set (**S**) having those items (list of integers) whose sum of integers

Is always less then sum of integers of the next item in a set.

I/p: S={ [1,2,3], [3,8,5], [5,7,10], [6,2,0], [5,12,13] }

O/p: S={ [1,2,3], [3,8,5], [5,7,10] }