1. Given two lists, find the missing and additional values in both the lists.

Examples:

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

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

Output : Missing values in list1 = [8, 7]

Additional values in list1 = [1, 2, 3]

Missing values in list2 = [1, 2, 3]

Additional values in list2 = [7, 8]

Code :

a=[1, 2, 3, 4, 5, 6]  
b=[4, 5, 6, 7, 8]  
c=set(a)  
d=set(b)  
print(d.difference(c))  
print(c.difference(d))

1. Given two lists a, b. Check if two lists have at least one element common in them.

**Examples:**

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

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

Output : True

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

b=[6, 7, 8, 9]

Output : False

Code 1:

a={1, 2, 3, 4, 5}  
b={5, 6, 7, 8, 9}  
c=a&b  
##print(c)  
print(c.issubset(a&b))

code 2 :

a={1, 2, 3, 4, 5}  
b={6, 7, 8, 9}  
print(a.issubset(b))

1. There are various ways in which difference between two lists can be generated. In this article, we will see two most important ways in which this can be done. One by using the set() method, and another by not using it.  
   Examples:

Input :

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

list2 = [25, 40, 35]

Output :

[10, 20, 30, 15]

Explanation:

resultant list = list1 - list2

OUTPUT :

a={10, 15, 20, 25, 30, 35, 40}  
b={25, 40, 35}  
print(a-b)

1. In this article, we will try to a way in which the elements can be removed from the set in a sequential manner. Before going into that let’s learn various characteristic of a set. A Set is an unordered collection data type that is iterable, mutable and has no duplicate elements. Python’s set class represents the mathematical notion of a set. The major advantage of using a set, as opposed to a list, is that it has a highly optimized method for checking whether a specific element is contained in the 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()

OUTPUT :

a=set([12, 10, 13, 15, 8, 9])  
n=len(a)  
for i in range(0,n):  
 a.pop()  
 print(a)

1. In this article, we will learn how to get the maximum and minimum element in a set in Python, using the built-in functions of Python.  
   Examples:

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

Output : max is 65

Input : set = ([4, 12, 10, 9, 4, 13])

Output : min is 4

OUTPUT :

a=set([8, 16, 24, 1, 25, 3, 10, 65, 55])  
print(max(a))  
b=set([4, 12, 10, 9, 4, 13])  
print(min(b))

C:\Users\Aamir\PycharmProjects\list\venv\Scripts\python.exe "C:/Users/Aamir/PycharmProjects/list/venv/Maximum and Minimum in a Set.py"

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