Python program to swap two elements in a list

# Python3 program to swap elements

# at given positions

# Swap function

def swapPositions(list, pos1, pos2):

    list[pos1], list[pos2] = list[pos2], list[pos1]

    return list

# Driver function

List = [23, 65, 19, 90]

pos1, pos2  = 1, 3

print(swapPositions(List, pos1-1, pos2-1))

# Python3 program to swap elements

# at given positions

# Swap function

def swapPositions(list, pos1, pos2):

    # popping both the elements from list

    first\_ele = list.pop(pos1)

    second\_ele = list.pop(pos2-1)

    # inserting in each others positions

    list.insert(pos1, second\_ele)

    list.insert(pos2, first\_ele)

    return list

# Driver function

List = [23, 65, 19, 90]

pos1, pos2  = 1, 3

print(swapPositions(List, pos1-1, pos2-1))

# Python program to remove Nth occurrence of the given word

# Python3 program to remove Nth

# occurrence of the given word

# Function to remove Ith word

def RemoveIthWord(list, word, N):

    count = 0

    for i in range(0, len(list)):

        if (list[i] == word):

            count = count + 1

            if(count == N):

                del(list[i])

                return True

    return False

# Driver code

list = ['geeks', 'for', 'geeks']

word = 'geeks'

N = 2

flag = RemoveIthWord(list, word, N)

if (flag == True):

    print("Updated list is: ", list)

else:

    print("Item not Updated")

# Python | Reversing a List

lst.reverse()

def Reverse(lst):

    new\_lst = lst[::-1]

    return new\_lst

# Python | Cloning or Copying a list

li\_copy = li1[:]

# Count occurrences of an element in a list

lst.count(x)

# Python program to find sum of elements in list

total = sum(list1)

# Python program to find smallest number in a list

list1.sort()

# printing the first element

print("Smallest element is:", \*list1[:1])

# Python program to find N largest elements from a list

# Python program to find N largest

# element from given list of integers

# Function returns N largest elements

def Nmaxelements(list1, N):

    final\_list = []

    for i in range(0, N):

        max1 = 0

        for j in range(len(list1)):

            if list1[j] > max1:

                max1 = list1[j];

        list1.remove(max1);

        final\_list.append(max1)

    print(final\_list)

# Driver code

list1 = [2, 6, 41, 85, 0, 3, 7, 6, 10]

N = 2

# Calling the function

Nmaxelements(list1, N)

Time Complexity : O(N \* size) where size is size of the given list.

# Python program to print even numbers in a list

even\_nos = [num for num in list1 if num % 2 == 0]

even\_nos = list(filter(lambda x: (x % 2 == 0), list1))

# Python program to count Even and Odd numbers in a List

odd\_count = len(list(filter(lambda x: (x%2 != 0) , list1)))

# we can also do len(list1) - odd\_count

even\_count = len(list(filter(lambda x: (x%2 == 0) , list1)))

Python | Sort the values of first list using second list

Given two lists, sort the values of one list using the second list.

Examples:

Input : list1 = ["a", "b", "c", "d", "e", "f", "g", "h", "i"]

list2 = [ 0, 1, 1, 0, 1, 2, 2, 0, 1]

Output :['a', 'd', 'h', 'b', 'c', 'e', 'i', 'f', 'g']

**Approach :**

1. Zip the two lists.
2. Create a new, sorted list based on the zip using sorted().
3. Using a list comprehension extract the first elements of each pair from the sorted, zipped list.

# Python program to sort

# one list using

# the other list

def sort\_list(list1, list2):

    zipped\_pairs = zip(list2, list1)

    z = [x for \_, x in sorted(zipped\_pairs)]

    return z

# driver code

x = ["a", "b", "c", "d", "e", "f", "g", "h", "i"]

y = [ 0,   1,   1,    0,   1,   2,   2,   0,   1]

# Python program to find Cumulative sum of a list

# Python code to get the Cumulative sum of a list

def Cumulative(lists):

cu\_list = []

length = len(lists)

cu\_list = [sum(lists[0: x + 1]) for x in range(0, length)]

return cu\_list

# Driver Code

lists = [10, 20, 30, 40, 50]

print (Cumulative(lists))

# Python | Remove empty tuples from a list

Input : tuples = [(), ('ram','15','8'), (), ('laxman', 'sita'),

('krishna', 'akbar', '45'), ('',''),()]

Output : [('ram', '15', '8'), ('laxman', 'sita'),

('krishna', 'akbar', '45'), ('', '')]

# Python program to remove empty tuples from a

# list of tuples function to remove empty tuples

# using list comprehension

def Remove(tuples):

    tuples = [t for t in tuples if t]

    return tuples

# Driver Code

tuples = [(), ('ram','15','8'), (), ('laxman', 'sita'),

          ('krishna', 'akbar', '45'), ('',''),()]

print(Remove(tuples))