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All students are requested to slove the following Questions

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101. Write a Python program to sort a given matrix in ascending order according to the sum of its rows.

Original Matrix:

[[1, 2, 3], [2, 4, 5], [1, 1, 1]]

Sort the said matrix in ascending order according to the sum of its rows

[[1, 1, 1], [1, 2, 3], [2, 4, 5]]

Original Matrix:

[[1, 2, 3], [-2, 4, -5], [1, -1, 1]]

Sort the said matrix in ascending order according to the sum of its rows

[[-2, 4, -5], [1, -1, 1], [1, 2, 3]]

102. Write a Python program to extract specified size of strings from a give list of string values.

Original list:

['Python', 'list', 'exercises', 'practice', 'solution']

length of the string to extract:

8

After extracting strings of specified length from the said list:

['practice', 'solution']

103. Write a Python program to extract specified number of elements from a given list, which follows each other continuously.

Original list:

[1, 1, 3, 4, 4, 5, 6, 7]

Extract 2 number of elements from the said list which follows each other continuously:

[1, 4]

Original lists:

[0, 1, 2, 3, 4, 4, 4, 4, 5, 7]

Extract 4 number of elements from the said list which follows each other continuously:

[4]

104. Write a Python program to find the difference between consecutive numbers in a given list.

Original list:

[1, 1, 3, 4, 4, 5, 6, 7]

Difference between consecutive numbers of the said list:

[0, 2, 1, 0, 1, 1, 1]

Original list:

[4, 5, 8, 9, 6, 10]

Difference between consecutive numbers of the said list:

[1, 3, 1, -3, 4]

105. Write a Python program to compute average of two given lists.

Original list:

[1, 1, 3, 4, 4, 5, 6, 7]

[0, 1, 2, 3, 4, 4, 5, 7, 8]

Average of two lists:

3.823529411764706

106. Write a Python program to count integer in a given mixed list.

Original list:

[1, 'abcd', 3, 1.2, 4, 'xyz', 5, 'pqr', 7, -5, -12.22]

Number of integers in the said mixed list:

6

107. Write a Python program to remove a specified column from a given nested list.

Original Nested list:

[[1, 2, 3], [2, 4, 5], [1, 1, 1]]

After removing 1st column:

[[2, 3], [4, 5], [1, 1]]

Original Nested list:

[[1, 2, 3], [-2, 4, -5], [1, -1, 1]]

After removing 3rd column:

[[1, 2], [-2, 4], [1, -1]]

108. Write a Python program to extract a specified column from a given nested list.

Original Nested list:

[[1, 2, 3], [2, 4, 5], [1, 1, 1]]

Extract 1st column:

[1, 2, 1]

Original Nested list:

[[1, 2, 3], [-2, 4, -5], [1, -1, 1]]

Extract 3rd column:

[3, -5, 1]

109. Write a Python program to rotate a given list by specified number of items to the right or left direction.

original List:

[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

Rotate the said list in left direction by 4:

[4, 5, 6, 7, 8, 9, 10, 1, 2, 3, 4]

Rotate the said list in left direction by 2:

[3, 4, 5, 6, 7, 8, 9, 10, 1, 2]

Rotate the said list in Right direction by 4:

[8, 9, 10, 1, 2, 3, 4, 5, 6]

Rotate the said list in Right direction by 2:

[9, 10, 1, 2, 3, 4, 5, 6, 7, 8]

110. Write a Python program to find the item with maximum occurrences in a given list.

Original list:

[2, 3, 8, 4, 7, 9, 8, 2, 6, 5, 1, 6, 1, 2, 3, 4, 6, 9, 1, 2]

Item with maximum occurrences of the said list:

2

111. Write a Python program to access multiple elements of specified index from a given list.

Original list:

[2, 3, 8, 4, 7, 9, 8, 2, 6, 5, 1, 6, 1, 2, 3, 4, 6, 9, 1, 2]

Index list:

[0, 3, 5, 7, 10]

Items with specified index of the said list:

[2, 4, 9, 2, 1]

112. Write a Python program to check whether a specified list is sorted or not.

Original list:

[1, 2, 4, 6, 8, 10, 12, 14, 16, 17]

Is the said list is sorted!

True

Original list:

[1, 2, 4, 6, 8, 10, 12, 14, 16, 17]

Is the said list is sorted!

False

113. Write a Python program to remove duplicate dictionary from a given list.

Original list with duplicate dictionary:

[{'Green': '#008000'}, {'Black': '#000000'}, {'Blue': '#0000FF'}, {'Green': '#008000'}]

After removing duplicate dictionary of the said list:

[{'Black': '#000000'}, {'Blue': '#0000FF'}, {'Green': '#008000'}]

114. Write a Python program to extract the nth element from a given list of tuples.

Original list:

[('Greyson Fulton', 98, 99), ('Brady Kent', 97, 96), ('Wyatt Knott', 91, 94), ('Beau Turnbull', 94, 98)]

Extract nth element ( n = 0 ) from the said list of tuples:

['Greyson Fulton', 'Brady Kent', 'Wyatt Knott', 'Beau Turnbull']

Extract nth element ( n = 2 ) from the said list of tuples:

[99, 96, 94, 98]

115. Write a Python program to check if the elements of a given list are unique or not.

Original list:

[1, 2, 4, 6, 8, 2, 1, 4, 10, 12, 14, 12, 16, 17]

Is the said list contains all unique elements!

False

Original list:

[2, 4, 6, 8, 10, 12, 14]

Is the said list contains all unique elements!

True

116. Write a Python program to sort a list of lists by a given index of the inner list.

Original list:

[('Greyson Fulton', 98, 99), ('Brady Kent', 97, 96), ('Wyatt Knott', 91, 94), ('Beau Turnbull', 94, 98)]

Sort the said list of lists by a given index ( Index = 0 ) of the inner list

[('Beau Turnbull', 94, 98), ('Brady Kent', 97, 96), ('Greyson Fulton', 98, 99), ('Wyatt Knott', 91, 94)]

Sort the said list of lists by a given index ( Index = 2 ) of the inner list

[('Wyatt Knott', 91, 94), ('Brady Kent', 97, 96), ('Beau Turnbull', 94, 98), ('Greyson Fulton', 98, 99)]

117. Write a Python program to remove all elements from a given list present in another list.

Original lists:

list1: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

list2: [2, 4, 6, 8]

Remove all elements from 'list1' present in 'list2:

[1, 3, 5, 7, 9, 10]

118. Write a Python program to find the difference between elements (n+1th - nth) of a given list of numeric values.

Original list:

[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

Dfference between elements (n+1th - nth) of the said list :

[1, 1, 1, 1, 1, 1, 1, 1, 1]

Original list:

[2, 4, 6, 8]

Dfference between elements (n+1th - nth) of the said list :

[2, 2, 2]

119. Write a Python program to check if a substring presents in a given list of string values.

Original list:

['red', 'black', 'white', 'green', 'orange']

Substring to search:

ack

Check if a substring presents in the said list of string values:

True

Substring to search:

abc

Check if a substring presents in the said list of string values:

False

120. Write a Python program to create a list taking alternate elements from a given list.

Original list:

['red', 'black', 'white', 'green', 'orange']

List with alternate elements from the said list:

['red', 'white', 'orange']

Original list:

[2, 0, 3, 4, 0, 2, 8, 3, 4, 2]

List with alternate elements from the said list:

[2, 3, 0, 8, 4]

121. Write a Python program to find the nested lists elements which are present in another list.

Original lists:

[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14]

[[12, 18, 23, 25, 45], [7, 11, 19, 24, 28], [1, 5, 8, 18, 15, 16]]

Intersection of said nested lists:

[[12], [7, 11], [1, 5, 8]]

122. Write a Python program to find common element(s) in a given nested lists.

Original lists:

[[12, 18, 23, 25, 45], [7, 12, 18, 24, 28], [1, 5, 8, 12, 15, 16, 18]]

Common element(s) in nested lists:

[18, 12]

123. Write a Python program to reverse strings in a given list of string values.

Original lists:

['Red', 'Green', 'Blue', 'White', 'Black']

Reverse strings of the said given list:

['deR', 'neerG', 'eulB', 'etihW', 'kcalB']

124. Write a Python program to find the maximum and minimum product from the pairs of tuple within a given list.

The original list, tuple :

[(2, 7), (2, 6), (1, 8), (4, 9)]

Maximum and minimum product from the pairs of the said tuple of list:

(36, 8)

125. Write a Python program to calculate the product of the unique numbers of a given list.

Original List : [10, 20, 30, 40, 20, 50, 60, 40]

Product of the unique numbers of the said list: 720000000

126. Write a Python program to interleave multiple lists of the same length.

Original list:

list1: [1, 2, 3, 4, 5, 6, 7]

list2: [10, 20, 30, 40, 50, 60, 70]

list3: [100, 200, 300, 400, 500, 600, 700]

Interleave multiple lists:

[1, 10, 100, 2, 20, 200, 3, 30, 300, 4, 40, 400, 5, 50, 500, 6, 60, 600, 7, 70, 700]

127. Write a Python program to remove words from a given list of strings containing a character or string.

Original list:

list1: ['Red color', 'Orange#', 'Green', 'Orange @', 'White']

Character list:

['#', 'color', '@']

New list:

['Red', '', 'Green', 'Orange', 'White']

128. Write a Python program to calculate the sum of the numbers in a list between the indices of a specified range.

Original list:

[2, 1, 5, 6, 8, 3, 4, 9, 10, 11, 8, 12]

Range: 8 , 10

Sum of the specified range:

29

129. Write a Python program to reverse each list in a given list of lists.

Original list of lists:

[[1, 2, 3, 4], [5, 6, 7, 8], [9, 10, 11, 12], [13, 14, 15, 16]]

Reverse each list in the said list of lists:

[[4, 3, 2, 1], [8, 7, 6, 5], [12, 11, 10, 9], [16, 15, 14, 13]]

130. Write a Python program to count the same pair in three given lists.

Original lists:

[1, 2, 3, 4, 5, 6, 7, 8]

[2, 2, 3, 1, 2, 6, 7, 9]

[2, 1, 3, 1, 2, 6, 7, 9]

Number of same pair of the said three given lists:

3

131. Write a Python program to count the frequency of consecutive duplicate elements in a given list of numbers.

Original lists:

[1, 2, 2, 2, 4, 4, 4, 5, 5, 5, 5]

Consecutive duplicate elements and their frequency:

([1, 2, 4, 5], [1, 3, 3, 4])

132. Write a Python program to find all index positions of the maximum and minimum values in a given list of numbers.

Original list:

[12, 33, 23, 10, 67, 89, 45, 667, 23, 12, 11, 10, 54]

Index positions of the maximum value of the said list:

7

Index positions of the minimum value of the said list:

3

133. Write a Python program to check common elements between two given list are in same order or not.

Original lists:

['red', 'green', 'black', 'orange']

['red', 'pink', 'green', 'white', 'black']

['white', 'orange', 'pink', 'black']

Test common elements between color1 and color2 are in same order?

True

Test common elements between color1 and color3 are in same order?

False

Test common elements between color2 and color3 are in same order?

False

134. Write a Python program to find the difference between two list including duplicate elements.

Original lists:

[1, 1, 2, 3, 3, 4, 4, 5, 6, 7]

[1, 1, 2, 4, 5, 6]

Difference between two said list including duplicate elements):

[3, 3, 4, 7]

135. Write a Python program to iterate over all pairs of consecutive items in a given list.

Original lists:

[1, 1, 2, 3, 3, 4, 4, 5]

Iterate over all pairs of consecutive items of the said list:

[(1, 1), (1, 2), (2, 3), (3, 3), (3, 4), (4, 4), (4, 5)]

136. Write a Python program to remove duplicate words from a given list of strings.

Original String:

['Python', 'Exercises', 'Practice', 'Solution', 'Exercises']

After removing duplicate words from the said list of strings:

['Python', 'Exercises', 'Practice', 'Solution']

137. Write a Python program to find a first even and odd number in a given list of numbers.

Original list:

[1, 3, 5, 7, 4, 1, 6, 8]

First even and odd number of the said list of numbers:

(4, 1)

138. Write a Python program to sort a given mixed list of integers and strings. Numbers must be sorted before strings.

Original list:

[19, 'red', 12, 'green', 'blue', 10, 'white', 'green', 1]

Sort the said mixed list of integers and strings:

[1, 10, 12, 19, 'blue', 'green', 'green', 'red', 'white']

139. Write a Python program to sort a given list of strings(numbers) numerically.

Original list:

['4', '12', '45', '7', '0', '100', '200', '-12', '-500']

Sort the said list of strings(numbers) numerically:

[-500, -12, 0, 4, 7, 12, 45, 100, 200]

140. Write a Python program to remove the specific item from a given list of lists.

Original list of lists:

[['Red', 'Maroon', 'Yellow', 'Olive'], ['#FF0000', '#800000', '#FFFF00', '#808000'], ['rgb(255,0,0)', 'rgb(128,0,0)', 'rgb(255,255,0)', 'rgb(128,128,0)']]

Remove 1st list from the saod given list of lists:

[['Maroon', 'Yellow', 'Olive'], ['#800000', '#FFFF00', '#808000'], ['rgb(128,0,0)', 'rgb(255,255,0)', 'rgb(128,128,0)']]

Remove 2nd list from the saod given list of lists:

[['Red', 'Yellow', 'Olive'], ['#FF0000', '#FFFF00', '#808000'], ['rgb(255,0,0)', 'rgb(255,255,0)', 'rgb(128,128,0)']]

Remove 4th list from the saod given list of lists:

[['Red', 'Maroon', 'Yellow'], ['#FF0000', '#800000', '#FFFF00'], ['rgb(255,0,0)', 'rgb(128,0,0)', 'rgb(255,255,0)']]

141. Write a Python program to remove empty lists from a given list of lists.

Original list:

[[], [], [], 'Red', 'Green', [1, 2], 'Blue', [], []]

After deleting the empty lists from the said lists of lists

['Red', 'Green', [1, 2], 'Blue']

142. Write a Python program to sum a specific column of a list in a given list of lists.

Original list of lists:

[[1, 2, 3, 2], [4, 5, 6, 2], [7, 8, 9, 5]]

Sum: 1st column of the said list of lists:

12

Sum: 2nd column of the said list of lists:

15

Sum: 4th column of the said list of lists:

9

143. Write a Python program to get the frequency of the elements in a given list of lists.

Original list of lists:

[[1, 2, 3, 2], [4, 5, 6, 2], [7, 8, 9, 5]]

Frequency of the elements in the said list of lists:

{1: 1, 2: 3, 3: 1, 4: 1, 5: 2, 6: 1, 7: 1, 8: 1, 9: 1}

144. Write a Python program to extract every first or specified element from a given two-dimensional list.

Original list of lists:

[[1, 2, 3, 2], [4, 5, 6, 2], [7, 1, 9, 5]]

Extract every first element from the said given two dimensional list:

[1, 4, 7]

Extract every third element from the said given two dimensional list:

[3, 6, 9]

145. Write a Python program to generate a number in a specified range except some specific numbers.

Generate a number in a specified range (1, 10) except [2, 9, 10]

7

Generate a number in a specified range (-5, 5) except [-5,0,4,3,2]

-4

146. Write a Python program to compute the sum of digits of each number of a given list.

Original tuple:

[10, 2, 56]

Sum of digits of each number of the said list of integers:

14

Original tuple:

[10, 20, 4, 5, 'b', 70, 'a']

Sum of digits of each number of the said list of integers:

19

Original tuple:

[10, 20, -4, 5, -70]

Sum of digits of each number of the said list of integers:

19

147. Write a Python program to interleave two given list into another list randomly.

Original lists:

[1, 2, 7, 8, 3, 7]

[4, 3, 8, 9, 4, 3, 8, 9]

Interleave two given list into another list randomly:

[4, 1, 2, 3, 8, 9, 4, 3, 7, 8, 9, 8, 3, 7]

148. Write a Python program to remove specific words from a given list.

Original list:

['red', 'green', 'blue', 'white', 'black', 'orange']

Remove words:

['white', 'orange']

After removing the specified words from the said list:

['red', 'green', 'blue', 'black']

149. Write a Python program to get all possible combinations of the elements of a given list.

Original list:

['orange', 'red', 'green', 'blue']

All possible combinations of the said list's elements:

[[], ['orange'], ['red'], ['red', 'orange'], ['green'], ['green', 'orange'], ['green', 'red'], ['green', 'red', 'orange'], ['blue'], ['blue', 'orange'], ['blue', 'red'], ['blue', 'red', 'orange'], ['blue', 'green'], ['blue', 'green', 'orange'], ['blue', 'green', 'red'], ['blue', 'green', 'red', 'orange']]

150. Write a Python program to reverse a given list of lists.

Original list:

[['orange', 'red'], ['green', 'blue'], ['white', 'black', 'pink']]

Reverse said list of lists:

[['white', 'black', 'pink'], ['green', 'blue'], ['orange', 'red']]

Original list:

[[1, 2, 3, 4], [0, 2, 4, 5], [2, 3, 4, 2, 4]]

Reverse said list of lists:

[[2, 3, 4, 2, 4], [0, 2, 4, 5], [1, 2, 3, 4]]

151. Write a Python program to find the maximum and minimum values in a given list within specified index range.

Original list:

[4, 3, 0, 5, 3, 0, 2, 3, 4, 2, 4, 3, 5]

Index range:

3 to 8

Maximum and minimum values of the said given list within index range:

(5, 0)

152. Write a Python program to combine two given sorted lists using heapq module.

Original sorted lists:

[1, 3, 5, 7, 9, 11]

[0, 2, 4, 6, 8, 10]

After merging the said two sorted lists:

[0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11]

153. Write a Python program to check if a given element occurs at least n times in a list.

Original list:

[0, 1, 3, 5, 0, 3, 4, 5, 0, 8, 0, 3, 6, 0, 3, 1, 1, 0]

Check if 3 occurs at least 4 times in a list:

True

Check if 0 occurs at least 5 times in a list:

True

Check if 8 occurs at least 3 times in a list:

False

154. Write a Python program to join two given list of lists of same length, element wise.

Original lists:

[[10, 20], [30, 40], [50, 60], [30, 20, 80]]

[[61], [12, 14, 15], [12, 13, 19, 20], [12]]

Join the said two lists element wise:

[[10, 20, 61], [30, 40, 12, 14, 15], [50, 60, 12, 13, 19, 20], [30, 20, 80, 12]]

Original lists:

[['a', 'b'], ['b', 'c', 'd'], ['e', 'f']]

[['p', 'q'], ['p', 's', 't'], ['u', 'v', 'w']]

Join the said two lists element wise:

[['a', 'b', 'p', 'q'], ['b', 'c', 'd', 'p', 's', 't'], ['e', 'f', 'u', 'v', 'w']]

155. Write a Python program to add two given lists of different lengths, start from left.

Original lists:

[2, 4, 7, 0, 5, 8]

[3, 3, -1, 7]

Add said two lists from left:

[5, 7, 6, 7, 5, 8]

Original lists:

[1, 2, 3, 4, 5, 6]

[2, 4, -3]

Add said two lists from left:

[3, 6, 0, 4, 5, 6]

156. Write a Python program to add two given lists of different lengths, start from right.

Original lists:

[2, 4, 7, 0, 5, 8]

[3, 3, -1, 7]

Add said two lists from left:

[2, 4, 10, 3, 4, 15]

Original lists:

[1, 2, 3, 4, 5, 6]

[2, 4, -3]

Add said two lists from left:

[1, 2, 3, 6, 9, 3]

157. Write a Python program to interleave multiple given lists of different lengths.

Original lists:

[2, 4, 7, 0, 5, 8]

[2, 5, 8]

[0, 1]

[3, 3, -1, 7]

Interleave said lists of different lengths:

[2, 2, 0, 3, 4, 5, 1, 3, 7, 8, -1, 0, 7, 5, 8]

158. Write a Python program to find the maximum and minimum values in a given list of tuples.

Original list with tuples:

[('V', 60), ('VI', 70), ('VII', 75), ('VIII', 72), ('IX', 78), ('X', 70)]

Maximum and minimum values of the said list of tuples:

(78, 60)

159. Write a Python program to append the same value /a list multiple times to a list/list-of-lists.

Add a value(7), 5 times, to a list:

['7', '7', '7', '7', '7']

Add 5, 6 times, to a list:

[1, 2, 3, 4, 5, 5, 5, 5, 5, 5]

Add a list, 4 times, to a list of lists:

[[1, 2, 5], [1, 2, 5], [1, 2, 5], [1, 2, 5]]

Add a list, 3 times, to a list of lists:

[[5, 6, 7], [1, 2, 5], [1, 2, 5], [1, 2, 5], [1, 2, 5]]

160. Write a Python program to remove first specified number of elements from a given list satisfying a condition.

Remove the first 4 number of even numbers from the following list:

[3,10,4,7,5,7,8,3,3,4,5,9,3,4,9,8,5]

Output:

[3, 7, 5, 7, 3, 3, 5, 9, 3, 4, 9, 8, 5]

Original list:

[3, 10, 4, 7, 5, 7, 8, 3, 3, 4, 5, 9, 3, 4, 9, 8, 5]

Remove first 4 even numbers from the said list:

[3, 7, 5, 7, 3, 3, 5, 9, 3, 4, 9, 8, 5]

161. Write a Python program to check if a given list is strictly increasing or not. Moreover, If removing only one element from the list results in a strictly increasing list, we still consider the list true.

True

True

True

True

True

True

True

True

True

True

True

False

False

False

False

False

162. Write a Python program to find the last occurrence of a specified item in a given list.

Original list:

['s', 'd', 'f', 's', 'd', 'f', 's', 'f', 'k', 'o', 'p', 'i', 'w', 'e', 'k', 'c']

Last occurrence of f in the said list:

7

Last occurrence of c in the said list:

15

Last occurrence of k in the said list:

14

Last occurrence of w in the said list:

12

163. Write a Python program to get the index of the first element which is greater than a specified element.

Original list:

[12, 45, 23, 67, 78, 90, 100, 76, 38, 62, 73, 29, 83]

Index of the first element which is greater than 73 in the said list:

4

Index of the first element which is greater than 21 in the said list:

1

Index of the first element which is greater than 80 in the said list:

5

Index of the first element which is greater than 55 in the said list:

3

164. Write a Python program to get the items from a given list with specific condition.

Original list:

[12, 45, 23, 67, 78, 90, 45, 32, 100, 76, 38, 62, 73, 29, 83]

Number of Items of the said list which are even and greater than 45

5

165. Write a Python program to split a given list into specified sized chunks.

Original list:

[12, 45, 23, 67, 78, 90, 45, 32, 100, 76, 38, 62, 73, 29, 83]

Split the said list into equal size 3

[[12, 45, 23], [67, 78, 90], [45, 32, 100], [76, 38, 62], [73, 29, 83]]

Split the said list into equal size 4

[[12, 45, 23, 67], [78, 90, 45, 32], [100, 76, 38, 62], [73, 29, 83]]

Split the said list into equal size 5

[[12, 45, 23, 67, 78], [90, 45, 32, 100, 76], [38, 62, 73, 29, 83]]

166. Write a Python program to remove None value from a given list.

Original list:

[12, 0, None, 23, None, -55, 234, 89, None, 0, 6, -12]

Remove None value from the said list:

[12, 0, 23, -55, 234, 89, 0, 6, -12]

167. Write a Python program to convert a given list of strings into list of lists.

Original list of strings:

['Red', 'Maroon', 'Yellow', 'Olive']

Convert the said list of strings into list of lists:

[['R', 'e', 'd'], ['M', 'a', 'r', 'o', 'o', 'n'], ['Y', 'e', 'l', 'l', 'o', 'w'], ['O', 'l', 'i', 'v', 'e']]

168. Write a Python program to display vertically each element of a given list, list of lists.

Original list:

['a', 'b', 'c', 'd', 'e', 'f']

Display each element vertically of the said list:

a

b

c

d

e

f

Original list:

[[1, 2, 5], [4, 5, 8], [7, 3, 6]]

Display each element vertically of the said list of lists:

1 4 7

2 5 3

5 8 6

169. Write a Python program to convert a given list of strings and characters to a single list of characters.

Original list:

['red', 'white', 'a', 'b', 'black', 'f']

Convert the said list of strings and characters to a single list of characters:

['r', 'e', 'd', 'w', 'h', 'i', 't', 'e', 'a', 'b', 'b', 'l', 'a', 'c', 'k', 'f']

170. Write a Python program to insert an element in a given list after every nth position.

Original list:

[1, 2, 3, 4, 5, 6, 7, 8, 9, 0]

Insert a in the said list after 2 nd element:

[1, 2, 'a', 3, 4, 'a', 5, 6, 'a', 7, 8, 'a', 9, 0]

Insert b in the said list after 4 th element:

[1, 2, 3, 4, 'b', 5, 6, 7, 8, 'b', 9, 0]

171. Write a Python program to concatenate element-wise three given lists.

Original lists:

['0', '1', '2', '3', '4']

['red', 'green', 'black', 'blue', 'white']

['100', '200', '300', '400', '500']

Concatenate element-wise three said lists:

['0red100', '1green200', '2black300', '3blue400', '4white500']

172. Write a Python program to remove the last N number of elements from a given list.

Original lists:

[2, 3, 9, 8, 2, 0, 39, 84, 2, 2, 34, 2, 34, 5, 3, 5]

Remove the last 3 elements from the said list:

[2, 3, 9, 8, 2, 0, 39, 84, 2, 2, 34, 2, 34]

Remove the last 5 elements from the said list:

[2, 3, 9, 8, 2, 0, 39, 84, 2, 2, 34]

Remove the last 1 element from the said list:

[2, 3, 9, 8, 2, 0, 39, 84, 2, 2, 34, 2, 34, 5, 3]

173. Write a Python program to merge some list items in given list using index value.

Original lists:

['a', 'b', 'c', 'd', 'e', 'f', 'g']

Merge items from 2 to 4 in the said List:

['a', 'b', 'cd', 'e', 'f', 'g']

Merge items from 3 to 7 in the said List:

['a', 'b', 'c', 'defg']

174. Write a Python program to add a number to each element in a given list of numbers.

Original lists:

[3, 8, 9, 4, 5, 0, 5, 0, 3]

Add 3 to each element in the said list:

[6, 11, 12, 7, 8, 3, 8, 3, 6]

Original lists:

[3.2, 8, 9.9, 4.2, 5, 0.1, 5, 3.11, 0]

Add 0.51 to each element in the said list:

[3.71, 8.51, 10.41, 4.71, 5.51, 0.61, 5.51, 3.62, 0.51]

175. Write a Python program to find the minimum, maximum value for each tuple position in a given list of tuples.

Original list:

[(2, 3), (2, 4), (0, 6), (7, 1)]

Maximum value for each tuple position in the said list of tuples:

[7, 6]

Minimum value for each tuple position in the said list of tuples:

[0, 1]

176. Write a Python program to create a new list dividing two given lists of numbers.

Original list:

[7, 2, 3, 4, 9, 2, 3]

[7, 2, 3, 4, 9, 2, 3]

[0.7777777777777778, 0.25, 1.5, 1.3333333333333333, 3.0, 2.0, 1.5]

177. Write a Python program to find common elements in a given list of lists.

Original list:

[[7, 2, 3, 4, 7], [9, 2, 3, 2, 5], [8, 2, 3, 4, 4]]

Common elements of the said list of lists:

[2, 3]

Original list:

[['a', 'b', 'c'], ['b', 'c', 'd'], ['c', 'd', 'e']]

Common elements of the said list of lists:

['c']

178. Write a Python program to insert a specified element in a given list after every nth element.

Original list:

[1, 3, 5, 7, 9, 11, 0, 2, 4, 6, 8, 10, 8, 9, 0, 4, 3, 0]

Insert 20 in said list after every 4 th element:

[1, 3, 5, 7, 20, 9, 11, 0, 2, 20, 4, 6, 8, 10, 20, 8, 9, 0, 4, 20, 3, 0]

Original list:

['s', 'd', 'f', 'j', 's', 'a', 'j', 'd', 'f', 'd']

Insert Z in said list after every 3 th element:

['s', 'd', 'f', 'Z', 'j', 's', 'a', 'Z', 'j', 'd', 'f', 'Z', 'd']

179. Write a Python program to create the largest possible number using the elements of a given list of positive integers.

Original list:

[3, 40, 41, 43, 74, 9]

Largest possible number using the elements of the said list of positive integers:

9744341403

Original list:

[10, 40, 20, 30, 50, 60]

Largest possible number using the elements of the said list of positive integers:

605040302010

Original list:

[8, 4, 2, 9, 5, 6, 1, 0]

Largest possible number using the elements of the said list of positive integers:

98654210

180. Write a Python program to create the smallest possible number using the elements of a given list of positive integers.

Original list:

[3, 40, 41, 43, 74, 9]

Smallest possible number using the elements of the said list of positive integers:

3404143749

Original list:

[10, 40, 20, 30, 50, 60]

Smallest possible number using the elements of the said list of positive integers:

102030405060

Original list:

[8, 4, 2, 9, 5, 6, 1, 0]

Smallest possible number using the elements of the said list of positive integers:

01245689

181. Write a Python program to iterate a given list cyclically on specific index position.

Original list:

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

Iterate the said list cyclically on specific index position 3 :

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

Iterate the said list cyclically on specific index position 5 :

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

182. Write a Python program to calculate the maximum and minimum sum of a sublist in a given list of lists.

Original list:

[[1, 2, 3, 5], [2, 3, 5, 4], [0, 5, 4, 1], [3, 7, 2, 1], [1, 2, 1, 2]]

Maximum sum of sub list of the said list of lists:

[2, 3, 5, 4]

Minimum sum of sub list of the said list of lists:

[1, 2, 1, 2]

183. Write a Python program to get the unique values in a given list of lists.

Original list:

[[1, 2, 3, 5], [2, 3, 5, 4], [0, 5, 4, 1], [3, 7, 2, 1], [1, 2, 1, 2]]

Unique values of the said list of lists:

[0, 1, 2, 3, 4, 5, 7]

Original list:

[['h', 'g', 'l', 'k'], ['a', 'b', 'd', 'e', 'c'], ['j', 'i', 'y'], ['n', 'b', 'v', 'c'], ['x', 'z']]

Unique values of the said list of lists:

['e', 'd', 'c', 'b', 'x', 'k', 'n', 'h', 'g', 'j', 'i', 'a', 'l', 'y', 'v', 'z']

184. Write a Python program to form Bigrams of words in a given list of strings.

From Wikipedia:

A bigram or digram is a sequence of two adjacent elements from a string of tokens, which are typically letters, syllables, or words. A bigram is an n-gram for n=2. The frequency distribution of every bigram in a string is commonly used for simple statistical analysis of text in many applications, including in computational linguistics, cryptography, speech recognition, and so on.

Original list:

['Sum all the items in a list', 'Find the second smallest number in a list']

Bigram sequence of the said list:

[('Sum', 'all'), ('all', 'the'), ('the', 'items'), ('items', 'in'), ('in', 'a'), ('a', 'list'), ('Find', 'the'), ('the', 'second'), ('second', 'smallest'), ('smallest', 'number'), ('number', 'in'), ('in', 'a'), ('a', 'list')]

185. Write a Python program to convert a given decimal number to binary list.

Original Number: 8

Decimal number ( 8 ) to binary list:

[1, 0, 0, 0]

Original Number: 45

Decimal number ( 45 ) to binary list:

[1, 0, 1, 1, 0, 1]

Original Number: 100

Decimal number ( 100 ) to binary list:

[1, 1, 0, 0, 1, 0, 0]

186. Write a Python program to swap two sublists in a given list.

Original list:

[0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15]

Swap two sublists of the said list:

[0, 6, 7, 8, 9, 3, 4, 5, 1, 2, 10, 11, 12, 13, 14, 15]

Swap two sublists of the said list:

[0, 9, 3, 8, 6, 7, 4, 5, 1, 2, 10, 11, 12, 13, 14, 15]

187. Write a Python program to convert a given list of tuples to a list of strings.

Original list of tuples:

[('red', 'green'), ('black', 'white'), ('orange', 'pink')]

Convert the said list of tuples to a list of strings:

['red green', 'black white', 'orange pink']

Original list of tuples:

[('Laiba', 'Delacruz'), ('Mali', 'Stacey', 'Drummond'), ('Raja', 'Welch'), ('Saarah', 'Stone')]

Convert the said list of tuples to a list of strings:

['Laiba Delacruz', 'Mali Stacey Drummond', 'Raja Welch', 'Saarah Stone']

188. Write a Python program to sort a given list of tuples on specified element.

Original list of tuples:

[('item2', 10, 10.12), ('item3', 15, 25.1), ('item1', 11, 24.5), ('item4', 12, 22.5)]

Sort on 1st element of the tuple of the said list:

[('item1', 11, 24.5), ('item2', 10, 10.12), ('item3', 15, 25.1), ('item4', 12, 22.5)]

Sort on 2nd element of the tuple of the said list:

[('item2', 10, 10.12), ('item1', 11, 24.5), ('item4', 12, 22.5), ('item3', 15, 25.1)]

Sort on 3rd element of the tuple of the said list:

[('item2', 10, 10.12), ('item4', 12, 22.5), ('item1', 11, 24.5), ('item3', 15, 25.1)]

189. Write a Python program to shift last element to first position and first element to last position in a given list.

Original list:

[1, 2, 3, 4, 5, 6, 7]

Shift last element to first position and first element to last position of the said list:

[7, 2, 3, 4, 5, 6, 1]

Original list:

['s', 'd', 'f', 'd', 's', 's', 'd', 'f']

Shift last element to first position and first element to last position of the said list:

['f', 'd', 'f', 'd', 's', 's', 'd', 's']

190. Write a Python program to find the specified number of largest products from two given list, multiplying an element from each list.

Original lists:

[1, 2, 3, 4, 5, 6]

[3, 6, 8, 9, 10, 6]

3 Number of largest products from the said two lists:

[60, 54, 50]

4 Number of largest products from the said two lists:

[60, 54, 50, 48]

191. Write a Python program to find the maximum and minimum value of the three given lists.

Original lists:

[2, 3, 5, 8, 7, 2, 3]

[4, 3, 9, 0, 4, 3, 9]

[2, 1, 5, 6, 5, 5, 4]

Maximum value of the said three lists:

9

Minimum value of the said three lists:

0

192. Write a Python program to remove all strings from a given list of tuples.

Original list:

[(100, 'Math'), (80, 'Math'), (90, 'Math'), (88, 'Science', 89), (90, 'Science', 92)]

Remove all strings from the said list of tuples:

[(100,), (80,), (90,), (88, 89), (90, 92)]

193. Write a Python program to find the dimension of a given matrix.

Original list:

[[1, 2], [2, 4]]

Dimension of the said matrix:

(2, 2)

Original list:

[[0, 1, 2], [2, 4, 5]]

Dimension of the said matrix:

(2, 3)

Original list:

[[0, 1, 2], [2, 4, 5], [2, 3, 4]]

Dimension of the said matrix:

(3, 3)

194. Write a Python program to sum two or more lists, the lengths of the lists may be different.

Original list:

[[1, 2, 4], [2, 4, 4], [1, 2]]

Sum said lists with different lengths:

[4, 8, 8]

Original list:

[[1], [2, 4, 4], [1, 2], [4]]

Sum said lists with different lengths:

[8, 6, 4]

195. Write a Python program to traverse a given list in reverse order, also print the elements with original index.

Original list:

['red', 'green', 'white', 'black']

Traverse the said list in reverse order:

black

white

green

red

Traverse the said list in reverse order with original index:

3 black

2 white

1 green

0 red

196. Write a Python program to move a specified element in a given list.

Original list:

['red', 'green', 'white', 'black', 'orange']

Move white at the end of the said list:

['red', 'green', 'black', 'orange', 'white']

Original list:

['red', 'green', 'white', 'black', 'orange']

Move red at the end of the said list:

['green', 'white', 'black', 'orange', 'red']

Original list:

['red', 'green', 'white', 'black', 'orange']

Move black at the end of the said list:

['red', 'green', 'white', 'orange', 'black']

197. Write a Python program to compute the average of nth elements in a given list of lists with different lengths.

Original list:

[[0, 1, 2], [2, 3, 4], [3, 4, 5, 6], [7, 8, 9, 10, 11], [12, 13, 14]]

Average of n-th elements in the said list of lists with different lengths:

[4.8, 5.8, 6.8, 8.0, 11.0]

198. Write a Python program to compare two given lists and find the indices of the values present in both lists.

Original lists:

[1, 2, 3, 4, 5, 6]

[7, 8, 5, 2, 10, 12]

Compare said two lists and get the indices of the values present in both lists:

[1, 4]

Original lists:

[1, 2, 3, 4, 5, 6]

[7, 8, 5, 7, 10, 12]

Compare said two lists and get the indices of the values present in both lists:

[4]

Original lists:

[1, 2, 3, 4, 15, 6]

[7, 8, 5, 7, 10, 12]

Compare said two lists and get the indices of the values present in both lists:

[]

199. Write a Python program to convert a given unicode list to a list contains strings.

Original lists:

['S001', 'S002', 'S003', 'S004']

Convert the said unicode list to a list contains strings:

['S001', 'S002', 'S003', 'S004']

200. Write a Python program to pair up the consecutive elements of a given list.

Original lists:

[1, 2, 3, 4, 5, 6]

Pair up the consecutive elements of the said list:

[[1, 2], [2, 3], [3, 4], [4, 5], [5, 6]]

Original lists:

[1, 2, 3, 4, 5]

Pair up the consecutive elements of the said list:

[[1, 2], [2, 3], [3, 4], [4, 5]]