5/19/24, 11:47 AM List

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In [4]: # write a program which takes single input from user containing first name, last name
         info = input("enter first_name, last_name, age: ")
         info = info.split(",")
                                                               # create a list using split met
         print("first name is " + info[0])
                                                               #index 0 is first_name
         print("last name is " + info[1])
                                                               # index 1 is last name
         print(info[0] + " is " + info[2] + " years old")
                                                              #index 2 is age
         enter first name, last name, age: Mohit, Sharma, 32
         first name is Mohit
         last name is Sharma
         Mohit is 32 years old
In [12]: # combined the 2 list and diplay the same without using extend method
         list1 = [1,3,4]
          list2 = [2,4,6]
         combined_list = list1 + list2
         print(combined_list)
         [1, 3, 4, 2, 4, 6]
In [22]: # diplay a new list which contains only odd position index values from list.
         # LIST SLICING
         list1=[1,2,3,4,5,6,7,8]
         # list1[1::2] is slice operation that starts from index 1 and takes every 2nd eleme
         list2 = list1[1::2]
         print(list2)
         [2, 4, 6, 8]
In [29]: # take a ipl team name as input from user and display a list of all elements from t
         ipl= ['CSK','MI','KKR','LSG','PBKS']
         team_name = input("enter team name: ")
         if team_name in ipl:
              starting index = ipl.index(team name) #find the index of the team name from ipl
              list of elements = ipl[starting index:] #Slice the list from the index of the t
             print(list of elements)
          else:
             print("Team name is not in the list")
         enter team name: KKR
         ['KKR', 'LSG', 'PBKS']
In [34]: # take a ipl team name as input from user and display a list of all elements except
          ipl1 = ['CSK','MI','KKR','LSG','PBKS']
         team name = input("enter team name: ")
         if team name in ipl1:
              start index = ipl1.index(team name) # find the index of the element
             ipl1.pop(start_index) #remove the element from the list
             print(ipl1)
             print("Team name is not in the list")
         enter team name: MI
         ['CSK', 'KKR', 'LSG', 'PBKS']
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'''take a user input contains 2 comma seprated values index, new team.
In [38]:
          replace the index element of list with new value and display the same'''
          ipl= ['CSK','MI','KKR','LSG','PBKS']
          values = input("enter index,team : ")
          input_list = values.split(",") #convert the input into list
          v1 = int(input_list[0]) #assign the index number into variable v1 also convert into
          v2 = input_list[1] #assign the new team name into variable v2
          ipl[v1] = v2 #replace the index value with the new team name
          print(ipl)
          enter index,team : 3,GT
          ['CSK', 'MI', 'KKR', 'GT', 'PBKS']
In [41]: # take ipl team name as user input. display True if the team exists else display Fa
          ipl= ['CSK','MI','KKR','LSG','PBKS']
          team_name = input("enter team name: ")
          team_name in ipl #check whether team name exists
          enter team name: SRH
          False
Out[41]:
          '''take a user input contains 2 comma seprated values index,new_team . Add the new
In [52]:
          Display the old list , new list, length of original and new list'''
          ipl = ['CSK', 'MI', 'KKR', 'LSG', 'PBKS']
          # Take input from the user
          new_team = input("Enter the index and new team separated by a comma (e.g., 2,RCB):
          # Split the input to get the index and the new team name
          n1 = new_team.split(",")
          # Create a copy of the original list
          ipl_copy = ipl.copy()
          # Insert the new team at the specified index
          ipl_copy.insert(int(n1[0]), n1[1])
          # Display the old list, new list, and their lengths
          print("Old list:", ipl, "and length", len(ipl))
          print("New list:", ipl_copy, "and length", len(ipl_copy))
          Enter the index and new team separated by a comma (e.g., 2,RCB): 4,GT
         Old list: ['CSK', 'MI', 'KKR', 'LSG', 'PBKS'] and length 5
New list: ['CSK', 'MI', 'KKR', 'LSG', 'GT', 'PBKS'] and length 6
 In [ ]:
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