|  |  |
| --- | --- |
|  | **Practical 2: Study and Learn List, Tuple, Set and Dictionary** |
| CODE - DICTIONARY | # PRACTICAL 2 -Study and Learn List, Tuple, Set and Dictionary  # By - RUHI KANSAGARA  # ID - 20CS022  # Dictionary  # 1.Write a Python script to check whether a given key already exists in a dictionary.  dict = {1:2,2:4,3:6,4:8,5:10}  key = 3  if key in dict:  print(key,"is present")  else:  print(key,"is not present")  # 2. Write a Python script to merge two Python dictionaries.  days\_1 = {'Monday':1,'Tuesday':2,'Wednesday':3}  days\_2 = {'Thursday':4,'Friday':5,'Saturday':6,'Sunday':7}  days\_1.update(days\_2)  print(days\_1)  # 3.Write a Python program to sum all the items in a dictionary.  def returnSum(myDict):  list = []  for i in myDict:  list.append(myDict[i])  final = sum(list)  return final  dict\_num = {'a': 100, 'b': 200, 'c': 300}  print("Sum :", returnSum(dict\_num))  # 4.Write a Python script to add a key to a dictionary.  dict1 = {1:10,2:20}  dict2 = {3:30}  dict1.update(dict2)  print(dict1)  # 5.Write a Python script to concatenate following dictionaries to create a new one.  #  # Sample Dictionary :  #  # dic1={1:10, 2:20}  #  # dic2={3:30, 4:40}  #  # dic3={5:50,6:60}  dic1 = {1: 10, 2: 20}  dic2 = {3: 30, 4: 40}  dic3 = {5: 50, 6: 60}  dic2.update(dic3)  dic1.update(dic2)  print(dic1) |
| OUTPUT |  |
| CODE- SETS | # PRACTICAL 2 -Study and Learn List, Tuple, Set and Dictionary  # By - RUHI KANSAGARA  # ID - 20CS022  # Sets  # 1.Write a Python program to add member(s) in a set and clear a set  from typing import Set  languages = {'C','C++','HTML','Java'}  languages.add('Python')  print(languages)  languages.clear()  print(languages)  # 2.Write a Python program to remove an item from a set if it is present in the set.  Numbers = {10,20,30,40,50}  Numbers.remove(30)  print(Numbers)  # 3.Write a Python program to create an intersection, Union, difference of sets.  A = {1,2,3,4,5}  B = {1,6,2,7,3}  numbers = A.union(B)  print(numbers)  intersection\_num = A.intersection(B)  print(intersection\_num)  print(A.difference(B))  # 4.Write a Python program to find maximum and the minimum value in a set.  Set\_num = {75,100,45,89,110}  print(max(Set\_num))  print(min(Set\_num))  # 5. Write a Python program to find the most common elements and their counts from list, tuple, dictionary  print('LIST')  words=['yellow', 'green', 'blue', 'yellow','yellow','green']  print('list:',words)  from collections import Counter  c = Counter(words)  c.most\_common(1)  print ('the most common element from the list :',c.most\_common(1))  print('TUPLE')  words=('apple', 'grapes', 'cherry', 'grapes','cherry','orange')  print('tuple:',words)  from collections import Counter  c = Counter(words)  c.most\_common(1)  print ('the most common element from the tuple :',c.most\_common(1))  print('DICTIONARY')  word={'school':1, 'home':2, 'hospital':3,'school':4}  from collections import Counter  c = Counter(word)  c.most\_common(1)  print ('the most common element from the dict :',c.most\_common(1)) |
| OUTPUT |  |
| CODE - TUPLE | # PRACTICAL 2 -Study and Learn List, Tuple, Set and Dictionary  # By - RUHI KANSAGARA  # ID - 20CS022  # Tuple  # 1.Write a Python program to create a tuple with different data types.  tuple1 = ('Python',24,16.03,True)  print(tuple1)  # 2.Write a Python program to create a tuple with numbers and print one item.  Numbers = (10,20,30,40,50)  print(Numbers[0])  # 3.Write a Python program to add an item in a tuple.  Companies = ('Amazon','Oracle','TCS','Microsoft')  x = ('Infosys',)  Companies = Companies + x  print(Companies)  # 4.Write a Python program to convert a tuple to a string.  letters = ('P','y','t','h','o','n')  y = "".join(letters)  print(y)  # 5.Write a Python program to find the length of a tuple.  print(len(Companies)) |
| OUTPUT |  |