**XI TUPLE RELATED QUESTIONS**

Tuples Practice Questions with Solutions

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Write a program to create a tuple

x = () #Create an empty tuple

print(x)

tuplex = tuple() #Create an empty tuple with tuple() function built-in Python

print(tuplex)

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Program to Create a tuple with different data types

tuplex = ("tuple", False, 3.2, 1)

print(tuplex)

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Program to Create a tuple with numbers

tuplex = 5, 10, 15, 20, 25

print(tuplex)

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Program to Create a tuple of one item

tuplex = 5,

print(tuplex)

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Write a Python program to unpack a tuple in several variables.

tuplex = 4, 8, 3

print(tuplex)

n1, n2, n3 = tuplex

#unpack a tuple in variables

print(n1 + n2 + n3)

#the number of variables must be equal to the number of items of the tuple

n1, n2, n3, n4= tuplex

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Write a Python program to add an item in a tuple.

tuplex = (4, 6, 2, 8, 3, 1)

print(tuplex)

#tuples are immutable, so you can not add new elements

#using + operator you can add an element and it will create a new tuple

tuplex = tuplex + (9,)

print(tuplex)

#adding items in a specific index

tuplex = tuplex[:5] + (15, 20, 25) + tuplex[:5]

print(tuplex)

#converting the tuple to list

listx = list(tuplex)

#use different ways to add items in list

listx.append(30)

tuplex = tuple(listx)

print(tuplex)

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Write a Python program to get the 4th element and 4th element from last of a tuple.

tuplex = ("w", 3, "r", "e", "s", "o", "u", "r", "c", "e")

print(tuplex)

#Get item (4th element)of the tuple by index

item = tuplex[3]

print(item)

#Get item (4th element from last)by index negative

item1 = tuplex[-4]

print(item1)

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Write a Python program to find the repeated items of a tuple.

tuplex = 2, 4, 5, 6, 2, 3, 4, 4, 7

print(tuplex)

#return the number of times it appears in the tuple.

c = tuplex.count(4)

print(c)

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Write a Python program to slice a tuple.

tuplex = (2, 4, 3, 5, 4, 6, 7, 8, 6, 1)

#used tuple[start:stop] the start index is inclusive and the stop index

slice = tuplex[3:5]

#is exclusive

print(slice)

#if the start index isn't defined, is taken from the beginning of the tuple

slice = tuplex[:6]

print(\_slice)

#if the end index isn't defined, is taken until the end of the tuple

slice = tuplex[5:]

print(slice)

#if neither is defined, returns the full tuple

slice = tuplex[:]

print(slice)

#The indexes can be defined with negative values

slice = tuplex[-8:-4]

print(slice)

#create another tuple

tuplex = tuple("HELLO WORLD")

print(tuplex)

#step specify an increment between the elements to cut of the tuple

#tuple[start:stop:step]

slice = tuplex[2:9:2]

print(slice)

#returns a tuple with a jump every 3 items

slice = tuplex[::4]

print(\_slice)

#when step is negative the jump is made back

slice = tuplex[9:2:-4]

print(slice)

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Write a Python program to remove an item from a tuple.

tuplex = ("w", 3, "r", "s", "o", "u", "r", "c", "e")

print(tuplex)

#tuples are immutable, so you can not remove elements

#using + operator you can remove an item and it will create a new tuple

tuplex = tuplex[:2] + tuplex[3:]

print(tuplex)

#converting the tuple to list

listx = list(tuplex)

#use different ways to remove an item of the list

listx.remove("c")

#converting the tuple to list

tuplex = tuple(listx)

print(tuplex)

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Write a Python program to find the index of an item of a tuple.

tuplex = tuple("index tuple")

print(tuplex)

#get index of the first item whose value is passed as parameter

index = tuplex.index("p")

print(index)

#define the index from which you want to search

index = tuplex.index("p", 5)

print(index)

#define the segment of the tuple to be searched

index = tuplex.index("e", 3, 6)

print(index)

#if item not exists in the tuple return ValueError Exception

index = tuplex.index("y")

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Write a Python program to reverse a tuple.

x = (5, 10, 15, 20)

# Reversed the tuple

y = reversed(x)

print(tuple(y))

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Write a Python program to find the length of a tuple.

tuplex = tuple("w3resource")

#use the len() function to known the length of tuple

print(len(tuplex))

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Write a Python program to create the tuple (‘a’,’bb’,’ccc’,’dddd’….) that ends with 26 copies of the letter z.

n=int(input("enter no"))

num=65

for i in range(0,n):

 for j in range(0,i+1):

 ch=chr(num)

 print(ch,end=' ')

 num=num+1

 print("\r")

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Write a program that create a tuple containing the squares of the integers 1 through 10

tuplex=(1,2,3,4,5,6,7,8,9,10)

for i in tuplex:

 print(i\*i)