**PYTHON TUPLE TASK**

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1. Create an empty tuple

ans}

#Create an empty tuple

x = ()

print(x)

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

tuplex = tuple()

print(tuplex)

output:

()

()

1. Create a tuple using string

ans}

# Python3 code to demonstrate working of

# Convert String to Tuple

# using map() + tuple() + int + split()

# initialize string

test\_str = "1, -5, 4, 6, 7"

# printing original string

print("The original string : " + str(test\_str))

# Convert String to Tuple

# using map() + tuple() + int + split()

res = tuple(map(int, test\_str.split(', ')))

# printing result

print("Tuple after getting conversion from String : " + str(res))

output:

The original string : 1, -5, 4, 6, 7

Tuple after getting conversion from String : (1, -5, 4, 6, 7)

1. Convert the list into tuple. List is given below

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

ans}

#Convert list to tuple

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

print(listx)

#use the tuple() function built-in Python, passing as parameter the list

tuplex = tuple(listx)

print(tuplex)

output:

[1, 2, 3, 4, 5]

(1, 2, 3, 4, 5)

1. Create a tuple with mixed data type

ans}

#Create a tuple with different data types

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

print(tuplex)

output:

('tuple', False, 3.2, 1)

1. Create a tuple with nested tuple

Tuple1 = (0, 1, 2, 3)

Tuple2 = ('python', 'class')

ans}

print “Create/print nested

tuple”

**t3 = “A”,t1,”B”,t2**

print t3

**Listing 3**

output:

**(‘A’, (0, 1, 2, 3), ‘B’, (‘python’, ‘class’))**

**Listing 4**

1. Concatenate the two given tuple

Tuple1 = (0, 1, 2, 3)

Tuple2 = ('python', 'is', 'easy')

ans}

# Python3 code to demonstrate working of

# Ways to concatenate tuples

# using + operator

# initialize tuples

test\_tup1 = (0, 1, 2, 3)

test\_tup2 = ('python', 'is', 'easy')

# printing original tuples

print("The original tuple 1 : " + str(test\_tup1))

print("The original tuple 2 : " + str(test\_tup2))

# Ways to concatenate tuples

# using + operator

res = test\_tup1 + test\_tup2

# printing result

print("The tuple after concatenation is : " + str(res))

output:

The original tuple 1 : (0, 1, 2, 3)

The original tuple 2 : ('python', 'is', 'easy')

The tuple after concatenation is : (0, 1, 2, 3, 'python', 'is', 'easy')

1. Write a program to convert a tuple into sting

x =('p','y',''t,'h','o','n')

ans}

tup = ('p','y',''t,'h','o','n')

str = ''.join(tup)

print(str)

output:

python

1. Write a Python program to count the repeated items of a tuple.

ans:

#create a tuple

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

print(tuplex)

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

count = tuplex.count(4)

print(count)

output:

(2, 4, 5, 6, 2, 3, 4, 4, 7)

3

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

x =('p','y',''t,'h','o','n')

ans]

#create a tuple

tuplex = 'p','y',''t,'h','o','n'

print(tuplex)

#tuples are immutable, so you can not remove elements

#using merge of tuples with the + 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("o")

#converting the tuple to list

tuplex = tuple(listx)

print(tuplex)

output:

('p','y',''t,'h','o','n')

('p','y',''t,'h','n')

10) Write a Python program to get the 4th element and 4th element from last of

a tuple.

ans}

#Get an item of the 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)

output

('w', 3, 'r', 'e', 's', 'o', 'u', 'r', 'c', 'e')

e

u

1. Write a Python program to reverse a tuple.

ans:

#create a tuple

x = ("w3resource")

# Reversed the tuple

y = reversed(x)

print(tuple(y))

#create another tuple

x = (5, 10, 15, 20)

# Reversed the tuple

y = reversed(x)

print(tuple(y))

output :

('e', 'c', 'r', 'u', 'o', 's', 'e', 'r', '3', 'w')

(20, 15, 10, 5)