Practice Set

**Q-3. What will be the output of the following code snippet?**

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

print(a[3:0:-1])

**A.** Syntax error  
**B.** [4, 3, 2]  
**C.** [4, 3]  
**D.** [4, 3, 2, 1]

#### Q-4. What will be the output of the following code snippet?

def f(value, values):

v = 1

values[0] = 44

t = 3

v = [1, 2, 3]

f(t, v)

print(t, v[0])

#### Q-5. What is the correct command to shuffle the following list?

fruit=['apple', 'banana', 'papaya', 'cherry']

**A.** fruit.shuffle()  
**B.** shuffle(fruit)  
**C.** random.shuffle(fruit)  
**D.** random.shuffleList(fruit)

#### Q-6. What will be the output of the following code snippet?

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

def fun(m):

v = m[0][0]

for row in m:

for element in row:

if v < element: v = element

return v

print(fun(data[0]))

**A.** 1  
**B.** 2  
**C.** 3  
**D.** 4  
**E.** 5  
**F.** 6

#### Q-7. What will be the output of the following code snippet?

arr = [[1, 2, 3, 4],

[4, 5, 6, 7],

[8, 9, 10, 11],

[12, 13, 14, 15]]

for i in range(0, 4):

print(arr[i].pop())

**A.** 1 2 3 4  
**B.** 1 4 8 12  
**C.** 4 7 11 15  
**D.** 12,13,14,15

#### Q-8. What will be the output of the following code snippet?

def f(i, values = []):

values.append(i)

print (values)

return values

f(1)

f(2)

f(3)

**A.** [1] [2] [3]  
**B.** [1, 2, 3]  
**C.** [1] [1, 2] [1, 2, 3]  
**D.** 1 2 3

#### Q-9. What will be the output of the following code snippet?

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

for i in range(1, 6):

arr[i - 1] = arr[i]

for i in range(0, 6):

print(arr[i], end = " ")

**A.** 1 2 3 4 5 6  
**B.** 2 3 4 5 6 1  
**C.** 1 1 2 3 4 5  
**D.** 2 3 4 5 6 6

#### Q-10. What will be the output of the following code snippet?

fruit\_list1 = ['Apple', 'Berry', 'Cherry', 'Papaya']

fruit\_list2 = fruit\_list1

fruit\_list3 = fruit\_list1[:]

fruit\_list2[0] = 'Guava'

fruit\_list3[1] = 'Kiwi'

sum = 0

for ls in (fruit\_list1, fruit\_list2, fruit\_list3):

if ls[0] == 'Guava':

sum += 1

if ls[1] == 'Kiwi':

sum += 20

print (sum)

**A.** 22  
**B.** 21  
**C.** 0  
**D.** 43

### Let’s begin with tuples in Python.

#### Q-1. What will be the output of the following code snippet?

init\_tuple = ()

print (init\_tuple.\_\_len\_\_())

**A.** None  
**B.**  1  
**C.** 0  
**D.** Exception

#### Q-2. What will be the output of the following code snippet?

init\_tuple\_a = 'a', 'b'

init\_tuple\_b = ('a', 'b')

print (init\_tuple\_a == init\_tuple\_b)

**A.** 0  
**B.**  1  
**C.** False  
**D.** True

#### Q-3. What will be the output of the following code snippet?

init\_tuple\_a = '1', '2'

init\_tuple\_b = ('3', '4')

print (init\_tuple\_a + init\_tuple\_b)

**A.** (1, 2, 3, 4)  
**B.**  (‘1’, ‘2’, ‘3’, ‘4’)  
**C.** [‘1’, ‘2’, ‘3’, ‘4’]  
**D.** None

#### Q-4. What will be the output of the following code snippet?

init\_tuple\_a = 1, 2

init\_tuple\_b = (3, 4)

[print(sum(x)) for x in [init\_tuple\_a + init\_tuple\_b]]

**A.** Nothing gets printed.  
**B.**  4  
**C.** 10  
**D.** TypeError: unsupported operand type

#### Q-5. What will be the output of the following code snippet?

init\_tuple = [(0, 1), (1, 2), (2, 3)]

result = sum(n for \_, n in init\_tuple)

print(result)

**A.** 3  
**B.** 6  
**C.** 9  
**D.** Nothing gets

#### Q-6. Which of the following statements given below is/are true?

**A.** Tuples have structure, lists have an order.  
**B.** Tuples are homogeneous, lists are heterogeneous.  
**C.** Tuples are immutable, lists are mutable.  
**D.** All of them.

#### Q-7. What will be the output of the following code snippet?

l = [1, 2, 3]

init\_tuple = ('Python',) \* (l.\_\_len\_\_() - l[::-1][0])

print(init\_tuple)

**A.** ()  
**B.** (‘Python’)  
**C.** (‘Python’, ‘Python’)  
**D.** Runtime Exception.

#### Q-8. What will be the output of the following code snippet?

init\_tuple = ('Python') \* 3

print(type(init\_tuple))

**A.** <class ‘tuple’>  
**B.** <class ‘str’>  
**C.** <class ‘list’>  
**D.** <class ‘function’>

#### Q-9. What will be the output of the following code snippet?

init\_tuple = (1,) \* 3

init\_tuple[0] = 2

print(init\_tuple)

**A.** (1, 1, 1)  
**B.** (2, 2, 2)  
**C.** (2, 1, 1)  
**D.** TypeError: ‘tuple’ object does not support item assignment

#### Q-10. What will be the output of the following code snippet?

init\_tuple = ((1, 2),) \* 7

print(len(init\_tuple[3:8]))

**A.** Exception  
**B.** 5  
**C.** 4  
**D.** None

### Let’s begin with dictionaries in Python.

#### Q-1. What will be the output of the following code snippet?

a = {(1,2):1,(2,3):2}

print(a[1,2])

**A.** Key Error  
**B.**  1  
**C.** {(2,3):2}  
**D.** {(1,2):1}

#### Q-2. What will be the output of the following code snippet?

a = {'a':1,'b':2,'c':3}

print (a['a','b'])

**A.** Key Error  
**B.** [1,2]  
**C.** {‘a’:1,’b’:2}  
**D.** (1,2)

#### Q-3. What will be the output of the following code snippet?

fruit = {}

def addone(index):

if index in fruit:

fruit[index] += 1

else:

fruit[index] = 1

addone('Apple')

addone('Banana')

addone('apple')

print (len(fruit))

**A.** 1  
**B.** 2  
**C.** 3  
**D.** 4

#### Q-4. What will be the output of the following code snippet?

arr = {}

arr[1] = 1

arr['1'] = 2

arr[1] += 1

sum = 0

for k in arr:

sum += arr[k]

print (sum)

**A.** 1  
**B.** 2  
**C.** 3  
**D.** 4

#### Q-5. What will be the output of the following code snippet?

my\_dict = {}

my\_dict[(1,2,4)] = 8

my\_dict[(4,2,1)] = 10

my\_dict[(1,2)] = 12

sum = 0

for k in my\_dict:

sum += my\_dict[k]

print (sum)

print(my\_dict)

**A.** Syntax error  
**B.** 30    
    {(1, 2): 12, (4, 2, 1): 10, (1, 2, 4): 8}  
**C.** 47  
    {(1, 2): 12, (4, 2, 1): 10, (1, 2, 4): 8}  
**D.** 30  
    {[1, 2]: 12, [4, 2, 1]: 10, [1, 2, 4]: 8}

#### Q-7. What will be the output of the following code snippet?

box = {}

jars = {}

crates = {}

box['biscuit'] = 1

box['cake'] = 3

jars['jam'] = 4

crates['box'] = box

crates['jars'] = jars

print (len(crates[box]))

**A.** 1  
**B.** 3  
**C.** 4  
**D.** Type Error

#### Q-8. What will be the output of the following code snippet?

dict = {'c': 97, 'a': 96, 'b': 98}

for \_ in sorted(dict):

print (dict[\_])

**A.** 96 98 97  
**B.** 96 97 98  
**C.** 98 97 96  
**D.** NameError

#### Q-9. What will be the output of the following code snippet?

rec = {"Name" : "Python", "Age":"20"}

r = rec.copy()

print(id(r) == id(rec))

**A.** True  
**B.** False  
**C.** 0  
**D.** 1

#### Q-10. What will be the output of the following code snippet?

rec = {"Name" : "Python", "Age":"20", "Addr" : "NJ", "Country" : "USA"}

id1 = id(rec)

del rec

rec = {"Name" : "Python", "Age":"20", "Addr" : "NJ", "Country" : "USA"}

id2 = id(rec)

print(id1 == id2)

**A.** True  
**B.** False  
**C.** 1  
**D.** Exception

Programming Questions :

**1.** Write a Python script to sort (ascending and descending) a dictionary by value

**2.**Write a Python script to add a key to a dictionary.

 Write a Python program to calculate the length of a string

Sample String : 'restart'  
Expected Result : 'resta$t'