**Section 14.2 Tuples**

14.1 Suppose t = (1, 2, 4, 3), which of the following is incorrect?

A. print(t[3])

B. t[3] = 45

C. print(max(t))

D. print(len(t))

E. print(sum(t))

B

Answer analysis:B

14.2 Suppose t = (1, 2, 4, 3), t[1 : 3] is \_\_\_\_\_\_\_\_\_.

A. (1, 2)

B. (1, 2, 4)

C. (2, 4)

D. (2, 4, 3)

E. (1, 2, 4, 3)

C

Answer analysis:C

14.3 Suppose t = (1, 2, 4, 3), t[1 : -1] is \_\_\_\_\_\_\_\_\_.

A. (1, 2)

B. (1, 2, 4)

C. (2, 4)

D. (2, 4, 3)

E. (1, 2, 4, 3)

C

Answer analysis:C

14.4 Suppose t = (1, 2, 4, 3, 8, 9), [t[i] for i in range(0, len(t), 2)] is \_\_\_\_\_\_\_\_\_.

A. [2, 3, 9]

B. [1, 2, 4, 3, 8, 9]

C. [1, 4, 8]

D. (1, 4, 8)

E. (2, 3, 9)

C

Answer analysis:C

14.5 Suppose t = (1, 2), 2 \* t is \_\_\_\_\_\_\_\_\_.

A. (1, 2, 1, 2)

B. [1, 2, 1, 2]

C. (1, 1, 2, 2)

D. [1, 1, 2, 2]

E. illegal

A

Answer analysis:A

14.6 Suppose t1 = (1, 2, 4, 3) and t2 = (1, 2, 3, 4), t1 < t2 is \_\_\_\_\_\_\_\_.

A. True

B. False

B

Answer analysis:B

**Section 14.3 Sets**

14.7 Which of the following statements produces {'a', 'b', 'c'}?

A. list("abac")

B. tuple("abac")

C. set("abac")

D. None

C

Answer analysis:C

14.8 You can use \_\_\_\_\_\_\_\_\_\_\_ to create an empty set.

A. { }

B. ( )

C. [ ]

D. set()

D

Answer analysis:D

14.9 Given two sets s1 and s2, s1 < s2 is \_\_\_\_\_\_\_\_\_.

A. true if len(s1) is less than len(s2)

B. true ifthe elements in s1 are compared less than the elements in s2.

C. true if s1 is a proper subset of s2

D. true if s1 is a proper superset of s2

E. illegal

C

Answer analysis:C

14.10 Suppose s = {1, 2, 4, 3}, \_\_\_\_\_\_\_ returns 4.

A. sum(s)

B. len(s)

C. min(s)

D. max(s)

E. None

BD

Answer analysis:BD

14.11 Suppose s = {1, 2, 4, 3}, which of the following is incorrect?

A. print(s[3])

B. s[3] = 45

C. print(max(s))

D. print(len(s))

E. print(sum(s))

AB

Answer analysis:AB

14.12 Suppose s = {1, 2, 4, 3}, what happens when invoking s.add(4)?

A. There is no add method for a set object.

B. This method is executed fine and 4 is added to the set.

C. Since 4 is already in the set, Python raises a KeyError exception.

D. You cannot add an element from a set.

E. This method is executed fine and 4 is not added to the set since 4 is already in the set.

E

Answer analysis:E

14.13 Suppose s = {1, 2, 4, 3}, what happens when invoking s.remove(12)?

A. There is no remove method for a set object.

B. This method is executed fine and no exception is raised.

C. Since 12 is not in the set, Python raises a KeyError exception.

D. You cannot remove an element from a set.

C

Answer analysis:C

14.14 Suppose s1 = {1, 2, 4, 3} and s2 = {1, 3, 4, 2}, \_\_\_\_\_\_\_\_ is true.

A. s1 == s2

B. s1 != s2

A

Answer analysis:A

14.15 Suppose s1 = {1, 2, 4, 3} and s2 = {0, 1, 5, 3, 4, 2, 13}, \_\_\_\_\_\_\_\_ is true.

A. s1.issubset(s2)

B. s1.issuperset(s2)

C. s2.issubset(s1)

D. s2.issuperset(s1)

AD

Answer analysis:AD

14.16 Suppose s1 = {1, 2, 4, 3} and s2 = {1, 5, 4, 13}, what is s1 | s2?

A. {1, 2, 4, 3, 1, 5, 4, 13}

B. {1, 2, 4, 3, 5, 13}

C. {1, 2, 4, 3}

D. {1, 5, 4, 13}

B

Answer analysis:B

14.17 Suppose s1 = {1, 2, 4, 3} and s2 = {1, 5, 4, 13}, what is s1 - s2?

A. {2, 3, 5, 13}

B. {1, 2, 4, 3, 5, 13}

C. {1, 2, 4, 3}

D. {1, 5, 4, 13}

E. {2, 3}

E

Answer analysis:E

14.18 Suppose s1 = {1, 2, 4, 3} and s2 = {1, 5, 4, 13}, what is s1 & s2?

A. {2, 3, 5, 13}

B. {1, 2, 4, 3, 5, 13}

C. {1, 4}

D. {1, 5, 4, 13}

E. {2, 3}

C

Answer analysis:C

14.19 Suppose s1 = {1, 2, 4, 3} and s2 = {1, 5, 4, 13}, what is s1 ^ s2?

A. {2, 3, 5, 13}

B. {4, 3, 5, 13}

C. {1, 4}

D. {1, 5, 4, 13}

E. {2, 3}

A

Answer analysis:A

14.20 Which of the following statement is false?

A. Lists are mutable

B. Tuples are mutable

C. Sets are mutable

D. Strings are mutable

BD

Answer analysis:BD

14.21 You can have duplicate elements in a \_\_\_\_\_\_\_\_?

A. list

B. tuple

C. set

AB

Answer analysis:AB

14.22 The elements in a \_\_\_\_\_\_\_\_ are ordered?

A. list

B. tuple

C. set

AB

Answer analysis:AB

14.23 Suppose s = {1, 2}, 2 \* s is \_\_\_\_\_\_\_\_\_.

A. (1, 2, 1, 2)

B. [1, 2, 1, 2]

C. (1, 1, 2, 2)

D. [1, 1, 2, 2]

E. illegal

E

Answer analysis:E

14.24 Suppose s1 = {1, 2, 4, 3} and s2 = {1, 5, 4, 13}, s1 + s2 is \_\_\_\_\_\_\_\_\_\_\_\_?

A. {1, 2, 4, 3, 1, 5, 4, 13}

B. {1, 2, 4, 3, 5, 13}

C. {1, 2, 4, 3}

D. {1, 5, 4, 13}

E. illegal

E

Answer analysis:E

**Section 14.5 Dictionary**

14.25 Which of the following statements create a dictionary?

A. d = {}

B. d = {"john":40, "peter":45}

C. d = {40:"john", 45:"peter"}

D. d = (40:"john", 45:"peter")

ABC

Answer analysis:ABC

14.26 Suppose d = {"john":40, "peter":45}, the keys are \_\_\_\_\_\_\_\_\_\_

A. "john", 40, 45, and "peter"

B. "john" and "peter"

C. 40 and 45

D. d = (40:"john", 45:"peter")

B

Answer analysis:B

14.27 Suppose d = {"john":40, "peter":45}, "john" in d is \_\_\_\_\_\_\_\_\_\_

A. True

B. False

A

Answer analysis:A

14.28 Suppose d1 = {"john":40, "peter":45} and d2 = {"john":466, "peter":45}, d1 == d2 is \_\_\_\_\_\_\_.

A. True

B. False

C. illegal

B

Answer analysis:B

14.29 Suppose d1 = {"john":40, "peter":45} and d2 = {"john":466, "peter":45}, d1 > d2 is \_\_\_\_\_\_\_.

A. True

B. False

C. illegal

C

Answer analysis:C

14.30 Suppose d = {"john":40, "peter":45}, d["john"] is \_\_\_\_\_\_\_\_\_\_

A. 40

B. 45

C. "john"

D. "peter"

A

Answer analysis:A

14.31 Suppose d = {"john":40, "peter":45}, to delete the entry for "john":40, use \_\_\_\_\_\_\_\_.

A. d.delete("john":40)

B. d.delete("john")

C. del d["john"]

D. del d("john":40)

C

Answer analysis:C

14.32 Suppose d = {"john":40, "peter":45}, to obtain the number of entries in dictionary, use \_\_\_\_\_\_\_\_.

A. d.size()

B. len(d)

C. size(d)

D. d.len()

B

Answer analysis:B

14.33 What will be displayed by the following code?

d = {"john":40, "peter":45}

print(list(d.keys()))

A. ["john", "peter"]

B. ["john":40, "peter":45]

C. ("john", "peter")

D. ("john":40, "peter":45)

A

Answer analysis:A

14.34 Suppose d = {"john":40, "peter":45}, what happens when retieving a value using d["susan"]?

A. Since "susan" is not a value in the set, Python raises a KeyError exception.

B. It is executed fine and no exception is raised, and it returns None.

C. Since "susan" is not a key in the set, Python raises a KeyError exception.

D. Since "susan" is not a key in the set, Python raises a syntax error.

C

Answer analysis:C

14.35 Suppose d = {"john":40, "peter":45}, what happens when retieving a value using d.get("susan")?

A. Since "susan" is not a value in the set, Python raises a KeyError exception.

B. It is executed fine and no exception is raised, and it returns None.

C. Since "susan" is not a key in the set, Python raises a KeyError exception.

D. Since "susan" is not a key in the set, Python raises a syntax error.

B

Answer analysis:B

14.36 Which of the following statements are true?

A. A Python list is immutable if every element in the list is immutable.

B. A Python set is immutable if every element in the set is immutable.

C. A Python tuple is immutable if every element in the tuple is immutable.

D. A Python tuple is immutable.

C

Answer analysis:C

14.37 Which of the following is a Python list?

A. [1, 2, 3]

B. (1, 2, 3)

C. {1, 2, 3}

D. {}

A

Answer analysis:A

14.38 Which of the following is a Python tuple?

A. [1, 2, 3]

B. (1, 2, 3)

C. {1, 2, 3}

D. {}

B

Answer analysis:B

14.39 Which of the following is a Python set?

A. [1, 2, 3]

B. (1, 2, 3)

C. {1, 2, 3}

D. {}

C

Answer analysis:C

14.40 Which of the following is a Python dictionary?

A. [1, 2, 3]

B. (1, 2, 3)

C. {1, 2, 3}

D. {}

D

Answer analysis:D

14.41 Which of the following sets is equal to {1, 2, 3}?

A. {1, 2, 3}

B. {2, 1, 3}

C. {3, 2, 1}

D. {2, 3, 1}

E. {1, 2, 3, 2, 1, 3}

ABCDE

Answer analysis:ABCDE