**Question 1:**  
What will be the output of the following code?

python

x = 5

x = 10

print(x)

A. 5  
B. 10  
C. Error  
D. None

**Question 2:**  
Which of the following is a valid variable name in Python?

A. 2nd\_name  
B. first-name  
C. user\_name  
D. my var

**Question 3:**  
What does this code print?

python

pi = 3.14

is\_raining = False

print(type(pi), type(is\_raining))

A. <class 'float'> <class 'bool'>  
B. float bool  
C. 3.14 False  
D. Error

**Question 4:**  
What is the result of this operation?

x = "5"

y = 3

print(x + y)

A. 53  
B. 8  
C. Error  
D. x + y

**Question 5:**  
You run the following code:

python

x = 4.2

y = 3

z = x \* y

print(type(z))

What is printed?

A. <class 'int'>  
B. <class 'float'>  
C. float  
D. int

**Question 6:**  
What is the output?

python

age = int("25")

print(age + 5)

A. 255  
B. 30  
C. Error  
D. "30"

**Question 7:**  
What is the result of this if condition?

python

x = 7

if x > 5:

print("Large")

else:

print("Small")

A. Small  
B. Large  
C. Error  
D. Nothing

**Question 8:**  
What does the following code do?

python

x = 3

if x > 5:

print("A")

elif x > 2:

print("B")

else:

print("C")

A. Prints A  
B. Prints B  
C. Prints C  
D. Error

**Question 9:**  
What is the output of this loop?

python

for i in range(1, 4):

print(i)

A. 1 2 3 4  
B. 1 2 3  
C. 0 1 2  
D. 1 2

**Question 10:**  
What does this code do?

python

x = 0

while x < 3:

print(x)

x += 1

A. Infinite loop  
B. Prints 0 1 2  
C. Prints 1 2 3  
D. Error

**Question 11:**  
What is printed?

python

total = 0

for i in range(2, 10, 2):

total += i

print(total)

A. 10  
B. 20  
C. 30  
D. 24

**Question 12:**  
What is the output of this function?

python

def greet(name):

return "Hello " + name

print(greet("Alice"))

A. Hello Alice  
B. Hello  
C. Alice  
D. Error

**Question 13:**  
Which statement creates a list?

A. list = (1, 2, 3)  
B. list = [1, 2, 3]  
C. list = {1, 2, 3}  
D. list = <1, 2, 3>

**Question 14:**  
Which of the following retrieves the value 75?

python

student = {'name': 'Emma', 'class': 9, 'marks': 75}

A. student(2)  
B. student['marks']  
C. student[2]  
D. student.marks

**Question 15:**  
What is the output of this code?

python

L = ['cat', 'dog', 'horse']

L[1] = 'human'

print(L)

A. ['cat', 'dog', 'horse']  
B. ['cat', 'human', 'horse']  
C. ['dog', 'cat', 'horse']  
D. Error

Correct Answers

**Question 1:**  
**Answer:** B. 10  
**Explanation:** The value of x is reassigned from 5 to 10, and the latest value is printed.

**Question 2:**  
**Answer:** C. user\_name  
**Explanation:** Variable names cannot start with numbers or contain spaces or dashes. user\_name is valid (snake\_case).

**Question 3:**  
**Answer:** A. <class 'float'> <class 'bool'>  
**Explanation:** pi is a float and is\_raining is a boolean. The type() function shows their types.

**Question 4:**  
**Answer:** C. Error  
**Explanation:** You cannot add a string (x) and an integer (y) directly. Python raises a TypeError.

**Question 5:**  
**Answer:** B. <class 'float'>  
**Explanation:** Multiplying a float by an integer results in a float.

**Question 6:**  
**Answer:** B. 30  
**Explanation:** The string "25" is converted to an integer, then 5 is added.

**Question 7:**  
**Answer:** B. Large  
**Explanation:** Since x is greater than 5, the if condition is true and "Large" is printed.

**Question 8:**  
**Answer:** B. Prints B  
**Explanation:** x = 3 is not greater than 5, but is greater than 2, so elif block executes.

**Question 9:**  
**Answer:** B. 1 2 3  
**Explanation:** range(1, 4) generates 1, 2, 3 (not including 4).

**Question 10:**  
**Answer:** B. Prints 0 1 2  
**Explanation:** x starts at 0 and increments up to 2 before the loop ends.

**Question 11:**  
**Answer:** D. 24  
**Explanation:** range(2, 10, 2) → 2 + 4 + 6 + 8 = 20

**Question 12:**  
**Answer:** A. Hello Alice  
**Explanation:** The function concatenates "Hello " with the provided name.

**Question 13:**  
**Answer:** B. list = [1, 2, 3]  
**Explanation:** Lists are created using square brackets [].

**Question 14:**  
**Answer:** B. student['marks']  
**Explanation:** Dictionary values are accessed using key names inside square brackets.

**Question 15:**  
**Answer:** B. ['cat', 'human', 'horse']  
**Explanation:** The second item (index 1) is reassigned from 'dog' to 'human'.