

2.10) Concerning the following program:

```
1. nums = []
2. while 1:
3.     input_value = input('Enter a number:')
4.     if input_value == 'done': break
5.     value = float(input_value)
6.     nums += [value]
7.     c = sum(nums) / len(nums)
8.     print('The value of c is ', c)
```

[] + [0]

[0]

[0] = [0] + [1]

Which of the following statements are correct?

A. The purpose of this program is to calculate the average of your inputted numbers. ✓

B. Line 4 is used to break the while loop. ✓

C. The list "nums" stores all your keyboard input numbers. ✓

D. Line 6 is used to add the inputted number to the summation. ✗

2.7) Which of the following statement(s) is/are correct?

```
1. lst1 = [1,2,3,4,5]
2. print(len(lst1[1:-2])) # 1
3. string = "my name is x"
4. print(string[1]) # 2
5. for i in string.split():
6.     print(i, end=", ") # 3
```

[2,3]

['my', 'name', 'is', 'x']

A. The output of the first print(): 2 ✗

B. The output of the second print(): name ✗

C. The output of the third print(): my, name, is, x, ✓

D. The output of the third print(): m, y, n, a, m, e, i, s, x, ✗

2.8) Which of the following codes in Python will NOT raise an error?

A. a,b = (1,2) ✗

B. a,b = 1.2 ✗

C. a,b = [1,2] ✗

D. a = b = 1 ✓

2.9) Which of the following statement will output True?

A. >>> 'a' in ['a', 'p', 'p', 'l', 'e'] ✓

B. >>> 'key1' in {'key1': 1, 'key2': 2}.items() ✗

C. >>> 'umbrella'.find('u') == 1 ✗

D. >>> "umbrella"[2:-1] == 'brell' ✓
0 1 2 3 4 5 6 7
u m b r e l l a
-2 -1

2.6) Concerning the following program, which of the following statement(s) is/are incorrect?

```
1. def question(a, b, c):  
2.     a = 4  
3.     b[1] = a**a  
4.     c *= a  
5.     print(a, ',', b, ',', c)  
6.     a = 3  
7.     b = [2, 8]  
8.     c = "9"  
9.     question(a,b,c)  
10.    print(a, ',', b, ',', c)
```

4, [2, 256], 9999

A. The output of the print() in line 5 is

4, [2, 16], 9999 ✗

B. The output of the print() in line 5 is

4, [2, 256], 9999 ✓

C. The output of the print() in line 10 is

3, [2, 256], 9 ✗

(3, [2, 8], '9')

D. The output of the print() in line 10 is

4, [2, 16], 999 ✗

1.8) What is the output of the following Python program?

```
1. a = 2
2. b = 5
3. c = 9
4. print(c//a+b*c%b**a)
```

Handwritten notes: $c/a = 9/2 = 4$, $5 * 9\% 25$, $b^{**}a = 5^{**}2 = 25$, $4 + 25 = 29$ (circled), 20 (circled).

A. 4

B. 24

C. 84

D. 49

1.10) What will be the output of the following Python code?

```
1. def func(a, b=5, c=10):
2.     print('a is', a, 'and b is', b, 'and c is', c)
3. func(3, 7)
4. func(25, c=24)
5. func(c=50, a=100)
```

Handwritten notes: $3, 7, 10$, $25, 5, 24$, $100, 5, 50$.

~~A.~~
a is 7 and b is 3 and c is 10
a is 25 and b is 5 and c is 24
a is 5 and b is 100 and c is 50

B.
a is 3 and b is 7 and c is 10
a is 25 and b is 5 and c is 24
a is 100 and b is 5 and c is 50

~~C.~~
a is 3 and b is 7 and c is 10
a is 5 and b is 25 and c is 24
a is 50 and b is 100 and c is 5

~~D.~~
None of the mentioned