PYTHON TEST 2

1. What will be the output of the following code?

a = [1, 2, 3, 4]

print(a[1:3])

A) [1, 2]
B) [2, 3]
C) [2, 3, 4]
D) [1, 2, 3]

2. What will be the output of this code?

x = (1, 2, 3)

x[1] = 5

print(x)

A) (1, 5, 3)
B) [1, 5, 3]
C) Error
D) None

3. What is the output?

x = [1, 2, 3]

x.append([4, 5])

print(x)

A) [1, 2, 3, 4, 5]
B) [1, 2, 3, [4, 5]]
C) [1, 2, 3, (4, 5)]
D) [1, 2, 3, 4], [5]

4. What will this code print?

a = {1, 2, 3, 4}

a.add(2)

print(len(a))

A) 6
B) 5
C) 4
D) Error

5. What is the output of the following code?

```
for i in range(3):

    for j in range(2):

        print(i + j, end=' ')
```

A) 0 1 1 2 2 3
B) 1 2 2 3 3 4
C) 0 1 2 3 4 5
D) 0 1 2 3 4

6. What will be the output?

```
t = (1, 2, 3)
print(t.count(2), t.index(2))
```

A) 1 1
B) 1 2
C) 2 1
D) Error

7. What will the code below output?

```
my_list = [0, 1, 2, 3]

for i in range(len(my_list)):

    my_list[i] += 1

print(my_list)
```

A) Error
B) [0, 1, 2, 3]
C) [1, 2, 3, 3]
D) [1, 2, 3, 4]

8. What will the following print?

```
x = [1, 2, 3]

y = x

y.append(4)

print(x)
```

A) [1, 2, 3]
B) [1, 2, 3, 4]
C) Error
D) [4]

9. Output of the following:

```
a = [1, 2, 3]

b = a.copy()

b[0] = 99

print(a, b)
```

A) [1, 2, 3] [99, 2, 3]
B) [99, 2, 3] [99, 2, 3]
C) [99, 2, 3] [1, 2, 3]
D) [1, 2, 3] [1, 2, 3]

10. What is the output?

```
x = [10, 20, 30, 40]

print(x.index(30))

print(x.index(50))
```

A) 2 then Error
B) 2 3
C) 3 then Error
D) Error only

11. What will be the output of the following code?

```
x = [1, 2, 3, 4]

print([i**2 for i in x if i % 2 == 0])
```

A) [1, 4, 9, 16]
B) [2, 4]
C) [4, 16]
D) [1, 9]

12. What is the output of the following code?

```
for i in range(3):

    print(i)

else:

    print("Done")
```

A) 0 1 2
B) 0 1 2 Done
C) 0 1 2 else
D) Done

13. What is the key difference between a while loop and a for loop in Python?

 A) while is used only for lists, for for integers
 B) for is used when the number of iterations is known; while is used
     when it's based on a condition
 C) while is faster than for
 D) There is no difference

14. What is the output of this code?

```
a = [1, 2, 3]

b = a[:]

b.append(4)

print(a, b)
```

A) [1, 2, 3, 4] [1, 2, 3, 4]
B) [1, 2, 3] [1, 2, 3]
C) [1, 2, 3] [1, 2, 3, 4]
D) Error

15. What is the output of the following code?

```
s = "hello world"
```

```
print(s[1:8:2])
```

A) "el o"
B) "elwl"
C) "elw"
D) "eood"