

Question- Answers

Low Achievers

Python Control Statements

1. Which of the following is not used as loop in Python?

- A. for loop
- B. while loop
- C. do-while loop
- D. None of the above

Ans : C

Explanation: do-while loop is not used as loop in Python.

2. Which of the following is True regarding loops in Python?

- A. Loops should be ended with keyword "end".
- B. No loop can be used to iterate through the elements of strings.
- C. Keyword "break" can be used to bring control out of the current loop.
- D. Keyword "continue" is used to continue with the remaining statements inside the loop.

Ans : C

Explanation: Keyword break can be used to bring control out of the current loop statement is True regarding loops in Python.

3. How many times will the loop run?

```
i=2
```

```
while(i>0):
```

```
    i=i-1
```

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

Ans : A

Explanation: The loop will run 2 times.

4. What will be the output of the following Python code?

```
list1 = [3 , 2 , 5 , 6 , 0 , 7 , 9]
```

```
sum = 0
```

```
sum1 = 0
```

```
for elem in list1:
```

```
    if (elem % 2 == 0):
```

```
        sum = sum + elem
```

```
        continue
```

```
    if (elem % 3 == 0):
```

```
        sum1 = sum1 + elem
```

```
print(sum , end=" ")
```

```
print(sum1)
```

A. 8 9

B. 8 3

C. 2 3

D. 8 12

Ans : D

Explanation: The output of the following python code is 8 12.

5. Which one of the following is a valid Python if statement:

A. if a>=2 :

B. if (a >= 2)

C. if (a => 22)

D. if a >= 22

Ans : A

Explanation: If statement always ended with colon (:). So, option A is correct.

6. What keyword would you use to add an alternative condition to an if statement?

A. else if

B. elseif

C. elif

D. None of the above

Ans : C

Explanation: elif is used to add an alternative condition to an if statement. So, option C is correct.

7. Can we write if/else into one line in python?

- A. Yes
- B. No
- C. if/else not used in python
- D. None of the above

Ans : A

Explanation: Yes, we can write if/else in one line. For eg

```
a=int(input("Enter Value: "))
```

```
i = 5 if a > 7 else 0
```

```
print(i)
```

So, option A is correct.

8. In a Python program, a control structure:

- A. Defines program-specific data structures
- B. Directs the order of execution of the statements in the program
- C. Dictates what happens before the program starts and after it terminates
- D. None of the above

Ans : B

Explanation: Control structures determine which statements in the program will be executed and in what order, allowing for statements to be skipped over or executed repeatedly. So, option B is correct.

9. Which statement will check if a is equal to b?

- A. if a = b:
- B. if a == b:
- C. if a === c:
- D. if a == b

Ans : B

Explanation: if a == b: statement will check if a is equal to b. So, option B is correct.

10. Does python have switch case statement?

- A. True
- B. False

- C. Python has switch statement but we can not use it.
- D. None of the above

Ans : B

Explanation: Python does not have switch case statement. So, option B is correct.

11. What will be the output of given Python code?

```
n=7
c=0
while(n):
    if(n>5):
        c=c+n-1
        n=n-1
    else:
        break
print(n)
print(c)
```

- A. 2
- B. 6 5 2
- C. 3
- D. 5 2

Ans : A

Explanation: 2 will be the output of given Python code.

12. What will be the output of given Python code?

```
str1="hello"
c=0
for x in str1:
    if(x!="l"):
        c=c+1
    else:
        pass
print(c)
```

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

Ans : D

Explanation: 3 will be the output of given Python code.

13. Which of the following Python code will give different output from the others?

A. for i in range(0,5):

 print(i)

B. for j in [0,1,2,3,4]:

 print(j)

C. for k in [0,1,2,3,4,5]:

 print(k)

D. for l in range(0,5,1):

 print(l)

Ans : C

Explanation: Option C python code will give different output from the others.

14. What will be the output of the following Python code?

```
for i in range(0,2,-1):
```

```
    print("Hello")
```

A. Hello

B. Hello Hello

C. No Output

D. Error

Ans : C

Explanation: There will be no output of the following python code.

15. Which of the following is a valid for loop in Python?

A. for(i=0; i < n; i++)

B. for i in range(0,5):

C. for i in range(0,5)

D. for i in range(5)

Ans : B

Explanation: For statement always ended with colon (:). So, option B is correct.

16. Which of the following sequences would be generated by the given line of code?

```
range (5, 0, -2)
```

- A. 5 4 3 2 1 0 -1
- B. 5 4 3 2 1 0
- C. 5 3 1
- D. None of the above

Ans : C

Explanation: The initial value is 5 which is decreased by 2 till 0 so we get 5, then 2 is decreased so we get 3 then the same thing repeated we get 1 and now when 2 is decreased we get -1 which is less than 0 so we stop and hence we get 5 3 1. So, option C is correct.

17. A while loop in Python is used for what type of iteration?

- A. indefinite
- B. discriminant
- C. definite
- D. indeterminate

Ans : A

Explanation: A while loop implements indefinite iteration, where the number of times the loop will be executed is not specified explicitly in advance. So, option A is correct.

18. When does the else statement written after loop executes?

- A. When break statement is executed in the loop
- B. When loop condition becomes false
- C. Else statement is always executed
- D. None of the above

Ans : B

Explanation: Else statement after loop will be executed only when the loop condition becomes false. So, option B is correct.

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

```
x = "abcdef"
i = "i"
while i in x:
    print(i, end=" ")
A. a b c d e f
B. abcdef
C. i i i i i.....
D. No Output
```

Ans : D

Explanation: There will be no output since there is no i in the string x. So, option D is correct.

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

```
x = "abcd"
for i in range(len(x)):
    print(i)
A. abcd
B. 0 1 2 3
C. 1 2 3 4
D. a b c d
```

Ans : B

Explanation: len(x) will give 4 and the loop will run for 4 times starting from 0. Hence output will be 0 1 2 3. So, option B is correct.

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

```
x = 12
for i in x:
    print(i)
```

- A. 12
- B. 1 2
- C. Error
- D. None of the above

Ans : C

Explanation: Objects of type int are not iterable. So, option C is correct.

22. What is entry controlled loop?

Ans. In looping concept, if the test condition take place before execution of the block then it is called entry controlled loop.

While(test condition) is an entry controlled loop.

23. What are endless loop? Why do such loops occur?

Ans. The loop that executes for infinite time and has no normal termination of loop is the endless loop. These endless loop occurs due to following reasons.

- Use of wrong test-condition
- Use of increment in place of decrement in update or vice-versa.
- Missing of update statement

24. Re-write the following code by using for loop

Using while loop	Using for loop
<pre>i=100 while(i>0): print(i) i-=3</pre>	<pre>for i in range(100,0,-3): print(i)</pre>
<pre>num=50 count=sum=0 while(num>0): count+=1 sum+=num num-=2</pre>	<pre>count=sum=0 for num in range(50,0,-2): count+=1 sum+=num if(count==10): print(sum/float(count))</pre>

<pre>if (count==10): print(sum/float(count)) break</pre>	<pre>break</pre>
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25. Write Disadvantages of jumping statement.

Ans.

- Un-conditional statement.
- Some of statements in loop skipped over to execute.
- Only used in loop construct.
- While using “continue statement”, loop updation statement should take place before continue statement otherwise it creates endless iteration.
- Break statement, exit only from the loop in which it is used. So, to exit from nested loops, multiple breaks requires at appropriate location.