

Questions 1. What is the output of the following code? `for i in range(3): print(i, end=" ")` A. 1 2 3 B. 0 1 2 C. 0 1 2 3 D. 1 2 2. How many times will this loop execute? `for i in range(5): print("Hello")` A. 4 B. 6 C. 5 D. Infinite 3. What is the output? `for i in range(2, 6): print(i, end=" ")` A. 2 3 4 5 B. 2 3 4 5 6 C. 3 4 5 6 D. 2 3 4 5 6 7 4. What is the output? `for i in range(1, 10, 3): print(i, end=" ")` A. 1 3 5 7 9 B. 1 4 7 C. 1 4 7 10 D. 3 6 9 5. What does `range(5, 1, -1)` produce? A. [1, 2, 3, 4, 5] B. [5, 4, 3, 2, 1] C. [5, 4, 3, 2] D. [5, 4, 3, 2, 1, 0] 6. What is printed by the following code? `for i in range(0, 10, 2): print(i, end=" ")` A. 0 to 9 B. 0, 2, 4, 6, 8, C. 0 to 10 D. 2, 4, 6, 8, 10 7. What does `range(10, 1, -3)` generate? A. 10 to 1 backwards B. [10, 7, 4] C. [10, 8, 6, 4, 2] D. [1, 4, 7, 10] 8. What is the last number printed by this code? `for i in range(5): print(i)` A. 5 B. 4 C. 0 D. 6 9. What does `range(5, 5)` return? A. [5] B. [0, 5] C. [] D. Error 10. Which `range()` call generates numbers from 1 to 10 inclusive? A. `range(1, 11)` B. `range(1, 10)` C. `range(11)` D. `range(0, 10)` 11. Choose the correct syntax to loop 10 times starting from 1. A. `for i in range(10):` B. `for i in range(1, 11):` C. `for i in range(0, 10):` D. `for i in 1 to 10:` 12. What is the output of the loop? `for i in range(10, 0, -2): print(i, end=" ")` A. 10 8 6 4 2 B. 1 3 5 7 9 C. 0 to 10 even D. Infinite loop 13. Which one is NOT a valid `range()` call? A. `range(5)` B. `range(0, 10)` C. `range(10, 0, -1)` D. `range(1, 10, 0)` 14. What is the step size in `range(2, 8)`? A. 1 B. 2 C. 6 D. Undefined 15. What is the sum of all values in `range(1, 5)`? A. 10 B. 15 C. 9 D. 14 16. What will this print? `for i in range(-3, 2): print(i, end=" ")` A. -3 to 1 B. 0 1 2 C. -3 -2 -1 D. -3 to 3 17. What is the length of `range(1, 10, 3)`? A. 2 B. 3 C. 4 D. 5 18. `range()` always returns... A. a list B. a tuple C. a range object D. an array 19. Which of the following prints even numbers from 2 to 10? A. `range(2, 10)` B. `range(2, 11, 2)` C. `range(0, 10, 2)` D. `range(2, 10, 3)` 20. What is the output? `for i in range(5): for j in range(2): print(i, j)` A. 5×2 = 10 lines B. One line with 10 numbers C. 7 lines D. Error 21. What is the correct syntax for a while loop in Python? A. `while x > 5 then:` B. `while (x > 5)` C. `while x > 5:` D. `while x > 5 { }` 22. What is the output of the following code? `x = 1 while x < 4: print(x) x += 1` A. 1 2 3 B. 1 2 3 4 C. 2 3 4 D. 0 1 2 23. What will happen if the condition in a while loop is always True and there is no break? A. Syntax error B. Executes once C. Infinite loop D. Terminates automatically 24. Which keyword is used to terminate a while loop early? A. `continue` B. `end` C. `exit` D. `break` 25. What is the output of the following code? `count = 0 while count < 3: print("Hello") count += 1` A. Hello (printed infinitely) B. Hello Hello Hello C. Hello Hello Hello Hello D. No output 26. What is the value of x after this loop ends? `x = 0 while x < 5: x += 1` A. 4 B. 5 C. 6 D. 0 27. What is the output? `x = 3 while x: print(x) x -= 1` A. 3 2 1 B. 2 1 0 C. 0 1 2 D. Infinite loop 28. When does a while loop stop executing? A. When True becomes False B. When the loop reaches 10 iterations C. After printing D. On user input 29. What is the output? `x = 0 while x < 3: x += 1 if x == 2: break print(x)` A. 1 2 3 B. 1 C. 2 D. 0 1 30. Which of the following causes the loop to skip the current iteration and move to the next? A. `exit` B. `pass` C. `continue` D. `break` 31. What is the output? `x = 5 while x > 0: x -= 1 if x == 2: continue print(x)` A. 4 3 2 1 0 B. 4 3 1 0 C. 5 4 3 2 1 D. 3 2 1 32. Which of the following is a valid while loop condition? A. `while 5 > 10:` B. `while:` C. `while (5)` D. `loop while` 33. What is the output? `i = 0 while i < 5: print(i) i += 2` A. 0 1 2 3 4 B. 0 2 4 C. 1 3 5 D. 0 1 3 5 34. What is the output? `x = 10 while x > 7: print("Looping") x -= 1` A. Prints "Looping" 2 times B. Prints "Looping" 3 times C. Prints "Looping" 4 times D. Infinite loop 35. What will be printed? `x = 0 while x < 3: print("Hi") x = x + 1` A. Hi B. Hi Hi C. Hi Hi Hi D. No output 36. What happens here? `x = 10 while x > 0: x += 1` A. Terminates at 0 B. Infinite loop C. Syntax error D. Prints 10 times 37. Which keyword can be used to do nothing in a loop block? A. `null` B. `skip` C. `pass` D. `idle` 38. What is the purpose of the else block in a while loop? A. Runs when loop condition is False B. Executes after every iteration C. Executes before the loop D. Executes only if break is used 39. What is the output? `x = 1 while x < 5: print(x) x += 1 else: print("Done")` A. 1 2 3 4 B. 1 2 3 4 Done C. Done D. No output 40. What is printed? `x = 2 while x < 2: print("Start") else: print("End")` A. Start B. End C. Start End D. Nothing 41. What is the output of the following code? `for i in range(2): for j in range(2): print(i, j)` A. 0 0 0 1 1 0 1 1 B. 0 1 0 2 1 2 C. 0 0 1 0 1 1 D. 0 0 42. How many times will the inner loop execute in this code? `for i in range(3): for j in range(2): pass` A. 5 B. 3 C. 6 D. 2 43. What is the output of the following code? `for i in range(1, 3): for j in range(1, 3): print(i * j, end=" ")` A. 1 2 2 4 B. 1 2 2 3 C. 1 2 3 4 D. 2 4 3 6 44. What is the output of the following code? `for i in range(2): for j in range(3): print(j, end=" ") print()` A. 0 1 2 0 1 2 B. 0 1 2 C. 0 1 2 0 1 D. 0 1 2 1 2 45. How many times will

print("Hello") execute in the following code? for i in range(2): for j in range(3): print("Hello") A. 2 B. 6 C. 3 D. 5
 46. What is printed by the following code? for i in range(2, 4): for j in range(1, 3): print(i, j, end=" ") A. 2 1 2 2 3 1 B. 2 1 2 2 3 2 C. 2 1 3 2 1 3 D. 2 1 2 2 3
 47. What is the output of the following code? for i in range(2): for j in range(2, 5): print(i, j) A. 0 2 0 3 0 4 1 2 1 3 1 4 B. 0 2 1 3 2 4 C. 0 2 1 3 2 4 3 5 D. 0 2 0 3 0 4
 48. How many times will the inner for loop run in the following code? for i in range(4): for j in range(i): pass A. 6 B. 10 C. 4 D. 3
 49. What is the output? for i in range(1, 3): for j in range(2, 5): print(i + j, end=" ") A. 3 4 4 5 5 6 B. 3 4 5 4 5 6 C. 3 4 5 D. 3 5 7
 50. What is the output of the following code? for i in range(2): for j in range(2): if i == 1: break print(i, j) A. 0 0 0 1 B. 0 0 1 0 C. 0 0 D. 1 0
 51. How can you modify the following code to print numbers from 1 to 9? for i in range(3): for j in range(3): print(i * j) A. Change i * j to i + j B. Change range(3) to range(1, 10) C. Change print(i * j) to print(i + j) D. None of the above
 52. What will the following code print? for i in range(2, 5): for j in range(1, 3): print(i + j) A. 3 4 3 4 4 5 B. 3 4 4 5 5 6 C. 2 3 4 5 5 6 D. 3 4 5 6
 53. How many iterations does the following nested loop perform? for i in range(3): for j in range(3): pass A. 6 B. 9 C. 3 D. 5
 54. What is the output of this code? for i in range(3): for j in range(i): print(i + j) A. 1 3 4 B. 2 3 4 C. 2 3 5 D. 0 1 3
 55. What is the purpose of the nested for loop in the following code? for i in range(3): for j in range(3): print(i + j) A. To sum i and j and print each sum B. To print values from 0 to 3 C. To repeat the loop until 9 is reached D. To print values in increasing order
 56. What will this code print? for i in range(2): for j in range(2): if j == 1: continue print(i, j) A. 0 0 0 1 1 0 B. 0 0 1 0 1 1 C. 0 0 1 1 D. 0 0 1
 57. What is the output of the following code? for i in range(1, 4): for j in range(1, 3): print(i * j, end=" ") A. 1 2 2 4 3 6 B. 1 2 2 3 3 4 C. 1 2 3 4 D. 1 2 2 4
 58. What is printed by the following code? for i in range(1, 4): for j in range(i): print(j, end=" ") print() A. 0 1 2 B. 0 1 C. 0 D. 0 1 2 3
 59. What will be printed by the following code? for i in range(2): for j in range(i, 2): print(i, j) A. 0 0 1 1 1 2 B. 0 0 1 1 2 2 C. 0 1 1 2 D. 0 0 1 1 2 2
 60. How many times will the inner loop execute in the following code? for i in range(5): for j in range(i + 1): pass A. 10 B. 15 C. 20 D. 25