1. What will be the output of the following code?
   ```
   for i in range(2, 10, 2):
   print(i, end=" ")
   ```
   A) 2 4 6 8
   B) 2 3 4 5 6 7 8 9
   C) 2 4 6
   D) 0 2 4 6 8
   Answer: A

2. Which of the following loop types can have an else clause in Python?
   A) for loop only
   B) while loop only
   C) Both for and while loops
   D) Neither for nor while loops
   Answer: C

3. What is the output of the following code?
   ```
   count = 0
   while count < 3:
   print(count)
   count += 1
   else:
   print("Done")
   ```
   A) 0 1 2
   B) 0 1 2 Done
   C) Done
   D) 1 2 3 Done
   Answer: B

4. What will break do inside a loop?
   A) Skips the current iteration
   B) Exits the loop immediately
   C) Ends the program
   D) Goes to the else block of the loop
   Answer: B

5. What does the continue statement do in Python loops?
   A) Exits the loop completely
   B) Skips the remaining code in the current iteration and moves to the next iteration
   C) Restarts the loop from the beginning

D) Jumps to the else clause of the loop
Answer: B

6. What is the output of the following code?
```
for i in range(1, 5):
if i == 3:
continue
print(i)
```
A) 1 2 3 4
B) 1 2 4
C) 1 4
D) 2 3 4
Answer: B

7. How many times will the loop run?
```
for i in range(5):
pass
```
A) 4
B) 5
C) Infinite
D) 6
Answer: B

8. Which of the following is true about the range() function?
A) range(start, stop, step) includes the stop value
B) range() returns a list
C) range(start, stop) excludes the stop value
D) step value cannot be negative
Answer: C

9. What is the output of the following code?
```
for i in range(10, 5, -2):
print(i, end=" ")
```
A) 10 8 6
B) 10 9 8 7 6
C) 8 6
D) 10 8
Answer: A

10. Which loop will definitely execute at least once in Python?
A) for loop
B) while loop
C) do-while loop

D) None of the above
Answer: D

11. What is the output of the following code?
```
i = 0
while i < 5:
i += 1
if i == 3:
break
print(i)
```
A) 2
B) 3
C) 4
D) 5
Answer: B

12. Which statement is true about nested loops?
A) Python allows only for-in nested loops
B) A loop inside another loop is called a nested loop
C) Nested loops cannot use break or continue
D) Nested loops always run infinitely
Answer: B

13. What will be the output of this 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) (1,2)
C) (0,0) (1,1)
D) (1,0) (2,1)
Answer: A

14. Which keyword ends the execution of the current loop iteration?
A) exit
B) break
C) stop
D) continue
Answer: D

15. Which of the following is the correct syntax of a for loop in Python?
A) for i in (0, 5):
B) for (i=0; i<5; i++):

C) for i in range(5):
D) for i: range(5)
Answer: C

16. What is the output of the following code?
```
for i in range(3):
print("Outer", i)
for j in range(2):
print("Inner", j)
```
A) Outer 0 Inner 0 Inner 1 Outer 1 Inner 0 Inner 1 Outer 2 Inner 0 Inner 1
B) Outer 0 Outer 1 Outer 2 Inner 0 Inner 1
C) Outer 0 Inner 0 Outer 1 Inner 1 Outer 2
D) Outer 0 Inner 1 Outer 1 Inner 0 Outer 2 Inner 1
Answer: A

17. What is the output of the following code?
```
for i in range(2):
for j in range(3):
if j == 1:
break
print(i, j)
```
A) (0,0) (1,0)
B) (0,0) (0,1) (1,0) (1,1)
C) (0,0) (0,1) (0,2) (1,0) (1,1) (1,2)
D) (0,1) (1,1)
Answer: A

18. Which of the following loops may become infinite if not handled carefully?
A) for loop
B) while loop
C) Both A and B
D) Neither A nor B
Answer: B

19. What is the output of the following code?
```
for i in range(5, 1, -1):
print(i, end=" ")
```
A) 5 4 3 2
B) 5 4 3 2 1
C) 4 3 2 1
D) 5 3 1
Answer: A

20. Which of the following statements is invalid?
    A) while True: pass
    B) for i in range(10): pass
    C) for i in 10: pass
    D) while 1: pass
    Answer: C

21. What is the output of this code?
    for i in range(3):
    for j in range(3):
    if i == j:
    continue
    print(i, j)
    A) (0,1) (0,2) (1,0) (1,2) (2,0) (2,1)
    B) (0,0) (1,1) (2,2)
    C) (1,0) (2,0)
    D) No output
    Answer: A

22. What is the output of the following code?
    for i in range(3):
    print(i)
    else:
    print("Finished")
    A) 0 1 2 Finished
    B) 0 1 2
    C) Finished
    D) 1 2 3 Finished
    Answer: A

23. What will happen if the step value in range() is 0?
    A) It will generate numbers infinitely
    B) It will raise a ValueError
    C) It will return an empty range
    D) It will return only the start value
    Answer: B

24. Which of the following is correct about break and continue?
    A) break exits loop; continue skips iteration
    B) break skips iteration; continue exits loop
    C) Both break and continue exit the loop

D) Both break and continue skip iteration
Answer: A

25. What is the output of this code?
```
i = 0
while i < 3:
print(i)
i += 1
else:
print("Done")
```
A) 0 1 2
B) 0 1 2 Done
C) Done
D) Infinite loop
Answer: B

26. Which of the following is equivalent to range(0, 5)?
A) range(5)
B) range(0, 5, 1)
C) Both A and B
D) None of these
Answer: C

27. What is the output of the following code?
```
for i in range(1, 10, 3):
print(i, end=" ")
```
A) 1 4 7
B) 1 3 5 7 9
C) 1 4 7 10
D) 1 2 3
Answer: A

28. Which loop will not run at all if the condition is false from the beginning?
A) for loop
B) while loop
C) Both for and while loop
D) None
Answer: B

29. What will be 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) 0 1 2 3 4 5
C) 0 1 0 1 0 1
D) 1 2 3 4 5 6
Answer: A

30. Which of the following is an infinite loop?
A) while True: pass
B) for i in range(1): pass
C) for i in range(0): pass
D) while False: pass
Answer: A

31. What is the output of the following code?
for i in range(2, 7, 2):
print(i, end=" ")
A) 2 3 4 5 6
B) 2 4 6
C) 2 4
D) 2 5
Answer: B

32. Which function generates a sequence of numbers in Python loops?
A) list()
B) range()
C) seq()
D) numbers()
Answer: B

33. What is the output of the following code?
for i in range(3):
for j in range(3):
if j > i:
break
print(i, j)
A) (0,0) (1,0) (1,1) (2,0) (2,1) (2,2)
B) (0,0) (1,1) (2,2)
C) (0,0) (1,0) (2,0)
D) No output
Answer: A

34. What is the output of this code?
for i in range(5, 0, -2):

```
print(i, end=" ")
```
A) 5 3 1
B) 5 4 3 2 1
C) 5 3
D) 1 3 5
Answer: A

35. Which of the following loops executes a fixed number of times when range() is used?
A) while loop
B) for loop
C) Both
D) None
Answer: B

36. What is the output of this code?
```
i = 1
while i < 10:
print(i, end=" ")
i *= 2
```
A) 1 2 4 8
B) 1 2 3 4 5 6 7 8 9
C) Infinite loop
D) 2 4 8
Answer: A

37. Which loop construct is best suited for iterating over a list?
A) for loop
B) while loop
C) do-while loop
D) None of these
Answer: A

38. What will be the output of this code?
```
for i in range(4):
if i == 2:
break
print(i)
else:
print("End")
```
A) 0 1 End
B) 0 1 2 End

C) 0 1
D) End
Answer: C

39. What is the output of this code?
```
for i in range(2):
for j in range(2):
for k in range(2):
print(i + j + k, end=" ")
```
A) 0 1 1 2 1 2 2 3
B) 0 1 2
C) 0 1 2 3
D) 1 2 3
Answer: A

40. Which keyword is used to exit from the entire loop?
A) stop
B) exit
C) break
D) continue
Answer: C

41. Which of the following is an infinite loop if condition is always True?
A) while loop
B) for loop with range()
C) Both A and B
D) None
Answer: A

42. What is the output of the following code?
```
for i in range(3):
for j in range(3):
if i == j:
break
print(i, j)
```
A) (1,0) (2,0) (2,1)
B) (0,0) (1,1) (2,2)
C) (0,1) (1,2)
D) No output
Answer: A

43. What is the output of this code?
```
for i in range(0, -5, -1):
```

```
print(i, end=" ")
```
A) 0 -1 -2 -3 -4
B) 0 -1 -2 -3 -4 -5
C) 0 -5
D) -1 -2 -3 -4
Answer: A

44. Which of the following will stop an infinite while loop?
A) break statement
B) continue statement
C) else clause
D) None of these
Answer: A

45. What is the output of this code?
```
s = "abc"
for i in s:
print(i, end="-")
```
A) a-b-c-
B) abc
C) a-b-c
D) a b c
Answer: A

46. What is the output of this code?
```
i = 0
while i < 3:
print(i)
i += 1
else:
print("Loop finished")
```
A) 0 1 2
B) 0 1 2 Loop finished
C) 1 2 3 Loop finished
D) Infinite loop
Answer: B

47. Which of the following is the correct way to iterate a list in reverse order?
A) for i in list[::-1]:
B) for i in reversed(list):
C) Both A and B

D) None
Answer: C

48. What will be the output of this code?
```
for i in range(2):
for j in range(2):
if i == 1 and j == 1:
continue
print(i, j)
```
A) (0,0) (0,1) (1,0)
B) (0,0) (1,0)
C) (1,1)
D) (0,0) (0,1) (1,1)
Answer: A

49. Which loop clause executes only when the loop finishes without a break?
A) else
B) finally
C) continue
D) return
Answer: A

50. Which loop in Python is used when the number of iterations is known in advance?
A) while loop
B) for loop
C) do-while loop
D) Infinite loop
Answer: B