

# 50 Java For-Loop Only Interview Questions

## Basic For-Loop Logic (115)

1. Print numbers from 1 to 100.
2. Print numbers from N to 1 (in reverse).
3. Print all even numbers from 1 to N.
4. Print all odd numbers from 1 to N.
5. Print the sum of first N natural numbers.
6. Print the product (factorial) of first N natural numbers.
7. Count the number of digits in a number.
8. Sum of digits of a number.
9. Product of digits of a number.
10. Reverse a number (e.g., 123 321).
11. Check if a number is a palindrome.
12. Check if a number is a prime.
13. Print all prime numbers from 1 to N.
14. Check if a number is an Armstrong number.
15. Print all Armstrong numbers from 1 to 999.

## Pattern Printing (1635)

16. Print a square of stars (e.g., 5x5).
17. Print a right-angled triangle.
18. Print a triangle with numbers:  
1  
1 2  
1 2 3
19. Print a triangle with constant numbers:  
1  
2 2  
3 3 3
20. Print Floyds Triangle.
21. Print a pyramid of stars.

22. Print an inverted triangle.
23. Print a diamond pattern.
24. Print a hollow square.
25. Print a pattern with alternating 1s and 0s.
26. Print a triangle with increasing odd numbers.
27. Print a triangle with increasing even numbers.
28. Print Pascals Triangle (basic format).
29. Print a checkerboard of 1s and 0s.
30. Print a left-aligned triangle with stars.
31. Print a right-aligned triangle.
32. Print an inverted pyramid.
33. Print a half-diamond star pattern.
34. Print a V shape with stars.
35. Print a pattern of numbers decreasing in each row.

### **Number-Based Logic (3650)**

36. Print Fibonacci series up to N terms.
37. Print reverse Fibonacci series.
38. Print factorials of numbers from 1 to N.
39. Find the GCD of two numbers using loop.
40. Find the LCM of two numbers using loop.
41. Check if a number is perfect (sum of factors = number).
42. Print all perfect numbers from 1 to N.
43. Count number of factors of a number.
44. Print all factors of a number.
45. Check if a number is strong (e.g., 145).
46. Print square of numbers from 1 to N.
47. Print cube of numbers from 1 to N.
48. Print numbers divisible by 3 and 5 between 1 to 100.
49. Print sum of series:  $1 + \frac{1}{2} + \frac{1}{3} + \dots + \frac{1}{N}$ .
50. Print numbers in pattern: 1, 4, 9, 16, ... N.