Java Common Interview Questions

1) Reverse a number

We reverse a number by repeatedly taking the last digit (using %10) and building the reverse by multiplying the existing reverse by 10 and adding the digit.

Sample Input: Input: 1234

Sample Output: Output: 4321

2) Palindrome number

A number is palindrome if it reads the same forward and backward. We reverse the number and compare it with the original.

Sample Input: Input: 121

Sample Output: Output: Palindrome

3) Count number of digits

We divide the number by 10 in a loop until it becomes 0. The number of divisions done gives the number of digits.

Sample Input: Input: 98765

Sample Output: Output: 5 digits

4) Count number of even and odd digits

Extract each digit using %10. If digit%2==0, it's even else odd. Count them separately.

Sample Input: Input: 24681

Sample Output: Output: Even digits = 3, Odd digits = 2

5) Find sum of digits

Extract digits using %10 and keep adding to sum until number becomes 0.

Sample Input: Input: 4321

Sample Output: Output: Sum = 10

6) Find the factorial of a number

Factorial of n is product of all numbers from 1 to n. We use a loop to multiply step by step.

Sample Input: Input: 5

Sample Output: Output: 120

7) Print Fibonacci series up to n terms

Fibonacci starts with 0,1 and next terms are sum of previous two terms. Loop is used to generate sequence.

Sample Input: Input: 7

Sample Output: Output: 0 1 1 2 3 5 8

8) Check whether a number is prime

Prime number is divisible only by 1 and itself. We check divisibility from 2 to n/2. If divisible, not prime.

Sample Input: Input: 7

Sample Output: Output: Prime

9) Find the largest digit in a number

Extract digits using %10 and compare with max. Update max accordingly.

Sample Input: Input: 5832

Sample Output: Output: Largest digit = 8

10) Check Armstrong number

An Armstrong number is equal to the sum of its digits raised to the power of the number of digits. Example: $153 = 1^3 + 5^3 + 3^3$.

Sample Input: Input: 153

Sample Output: Output: Armstrong number