

Python Functions – Logic Building Questions

Basic Level (Logic Building) – 20 Questions

- 1 Write a function that takes a number and returns whether it is even or odd.
- 2 Write a function that takes two numbers and returns the greater number.
- 3 Write a function that takes a number and returns its square and cube.
- 4 Write a function that takes a number and returns True if it is positive, else False.
- 5 Write a function that accepts a number and returns the sum of its digits.
- 6 Write a function that checks whether a number is divisible by both 3 and 5.
- 7 Write a function that takes a character and returns whether it is a vowel or consonant.
- 8 Write a function that takes three numbers and returns the largest.
- 9 Write a function that accepts a number and returns its factorial.
- 10 Write a function that checks whether a number is a palindrome.
- 11 Write a function that returns the count of digits in a number.
- 12 Write a function that accepts a number and returns its reverse.
- 13 Write a function that checks whether a number is prime.
- 14 Write a function that takes two numbers and returns their GCD.
- 15 Write a function that takes a number and returns the sum of first N natural numbers.
- 16 Write a function that checks whether a number is an Armstrong number.
- 17 Write a function that accepts marks and returns the grade based on conditions.
- 18 Write a function that takes a number and returns True if it is divisible by 7.
- 19 Write a function that takes two numbers and performs calculator operations based on user choice.
- 20 Write a function that checks whether a year is a leap year.

Intermediate & Advanced Level (Logic Building) – 20 Questions

- 1 Write a recursive function to calculate the sum of digits of a number.
- 2 Write a function that returns the nth Fibonacci number using recursion.
- 3 Write a function that checks whether a number is a perfect number.
- 4 Write a function that accepts a list and returns the second largest element.
- 5 Write a function that accepts a list and returns unique elements without using set().
- 6 Write a function that accepts a string and returns a dictionary of character frequencies.
- 7 Write a recursive function to reverse a string.
- 8 Write a function that accepts a number and returns its binary equivalent.
- 9 Write a function that checks whether two strings are anagrams.
- 10 Write a function that accepts a list of numbers and returns the count of even and odd numbers.

- 11 Write a function that returns the intersection of two lists without using built-in methods.
- 12 Write a function that checks whether a number is a strong number.
- 13 Write a function that accepts a sentence and returns the longest word.
- 14 Write a function that accepts a list and rotates it by k positions.
- 15 Write a recursive function to calculate power (x^y).
- 16 Write a function that returns True if a number is a Harshad number.
- 17 Write a function that accepts a list and removes duplicate elements while preserving order.
- 18 Write a function that accepts a string and checks whether it is a pangram.
- 19 Write a function that accepts a list of integers and returns the missing number from 1 to N.
- 20 Write a function that checks whether a number is a Kaprekar number.