# **Python Beginner Coding Test (40 Coding Questions)**

### **Section A: Data Types & Basic Operations (1–10)**

1. Create a variable called name and assign it your name. Print it.
2. Create two integer variables and print their sum, difference, product, and division.
3. Write a program to swap two numbers without using a third variable.
4. Write a program that takes user input for age and prints “Adult” if age ≥ 18, otherwise “Minor”.
5. Given a string "programming", print the number of times the letter 'g' appears.
6. Write a program that converts a given string "100" to an integer and adds 25 to it.
7. Write a program to find the largest number in the list [4, 9, 1, 7, 3].
8. Write a program to reverse the list [1, 2, 3, 4, 5].
9. Create a dictionary with keys name, age, and country, and print the value of age.
10. Write a program to convert a tuple (2, 4, 6, 8) into a list and print it.

### **Section B: Conditional Statements (11–18)**

1. Write a program to check whether a number entered by the user is even or odd.
2. Write a program to check if a given number is positive, negative, or zero.
3. Write a program to check if a given year is a leap year.
4. Write a program that takes two numbers and prints which one is greater.
5. Write a program that takes marks as input and prints “Pass” if marks ≥ 50, otherwise “Fail”.
6. Write a program that checks whether a character entered by the user is a vowel or consonant.
7. Write a program that takes three numbers and prints the largest among them.
8. Write a program that checks if a number is divisible by both 3 and 5.

### **Section C: Loops & Nested Loops (19–28)**

1. Write a program that prints numbers from 1 to 10 using a for loop.
2. Write a program that prints all even numbers from 1 to 20.
3. Write a program that calculates the sum of all numbers from 1 to 100 using a for loop.
4. Write a program that prints each letter of the word "PYTHON" on a new line.
5. Write a program that counts how many numbers between 1 and 50 are divisible by 5.
6. Write a program that prints all elements of a list using a while loop.
7. Write a program that finds the factorial of a given number using a loop.
8. Write a program that prints all numbers between 1 and 30 that are divisible by both 2 and 3.
9. Write a program that prints the squares of all numbers from 1 to 10.
10. Write a program using nested loops to print all pairs (i, j) where i and j range from 1 to 3.

### **Section D: Functions (29–36)**

1. Write a function called greet() that prints “Hello, World!”.
2. Write a function that takes a name as an argument and prints “Hello, !”.
3. Write a function that takes two numbers and returns their sum.
4. Write a function that returns the largest of three numbers.
5. Write a function that takes a list of numbers and returns the sum of all elements.
6. Write a function that checks if a given number is prime.
7. Write a function that takes a list of numbers and returns a new list with only even numbers.
8. Write a function that takes a string and returns the number of vowels in it.

### **Section E: Classes & Objects (37–40)**

1. Create a class Person with attributes name and age, and a method introduce() that prints “My name is and I am years old.”
2. Create a class Rectangle with attributes length and width, and a method area() that returns the area.
3. Create a class BankAccount with methods deposit(), withdraw(), and check\_balance().
4. Create a class Student with attributes name and marks, and a method grade() that prints “Pass” if marks ≥ 50, otherwise “Fail.”