# Python Tasks: Lists and Tuples

## 10 List Tasks

### Without Loop (5 Tasks)

1. 1. Create and Print a List - Create a list of 5 fruits and print it.
2. 2. Add and Remove Elements - Add a new fruit to the list and remove one fruit.
3. 3. Find Maximum and Minimum - Create a list of numbers and print the maximum and minimum values.
4. 4. Sort the List - Take a list of numbers and sort it in ascending order.
5. 5. Join Two Lists - Combine [1, 2, 3] and [4, 5, 6] into one list.

### Using for Loop (5 Tasks)

1. 6. Print All Items in a List - Create a list of cities and print each city using a for loop.
2. 7. Find Sum of List Items - Create a list of 5 numbers and find their sum using a loop.
3. 8. Count Even Numbers - From a list [1, 2, 3, 4, 5, 6, 7, 8], count how many are even.
4. 9. Square Each Number - Create a list [1, 2, 3, 4, 5] and print each number’s square using a loop.
5. 10. Reverse Print - Print all list items in reverse order using a loop (no built-in reverse).

## 20 Tuple Tasks (Beginner Level)

### Without Loop (10 Tasks)

1. 1. Create and Print a Tuple - Create a tuple of 5 colors and print it.
2. 2. Access Elements - Print the first and last elements of (10, 20, 30, 40, 50).
3. 3. Check Length - Find the length of a tuple using len().
4. 4. Check Value Present - Check if 25 exists in (10, 20, 25, 30, 35).
5. 5. Concatenate Two Tuples - Join (1, 2, 3) and (4, 5, 6).
6. 6. Find Index and Count - From (1, 2, 3, 2, 4, 2, 5) print the index and count of 2.
7. 7. Convert Tuple to List - Convert (1, 2, 3, 4) into a list and add one element.
8. 8. Slice Tuple - Print the middle 3 elements from (10, 20, 30, 40, 50, 60).
9. 9. Unpack Tuple - Unpack ('Apple', 'Banana', 'Cherry') into three variables.
10. 10. Nested Tuple - Create a tuple containing another tuple and print both.

### Using for Loop (10 Tasks)

1. 11. Print All Tuple Elements - Print each element in a tuple (5, 10, 15, 20, 25) using a loop.
2. 12. Find Sum of Tuple Elements - Use a loop to find the sum of (1, 2, 3, 4, 5).
3. 13. Print Each Character - Create a tuple ('A', 'B', 'C', 'D') and print each letter using a loop.
4. 14. Find Even Numbers - From (10, 11, 12, 13, 14, 15), print only even numbers.
5. 15. Count Odd Numbers - Count how many odd numbers are in (1, 2, 3, 4, 5, 6, 7).
6. 16. Find Smallest Number - Find the smallest value in (45, 12, 89, 33, 67) using a loop.
7. 17. Multiply All Elements - Multiply all numbers in (2, 3, 4, 5) using a loop.
8. 18. Tuple of Words - Tuple = ('apple', 'banana', 'grapes') Print each word in uppercase using a loop.
9. 19. Count Vowels - Create a tuple of letters and count how many vowels are there using a loop.
10. 20. Index Display - Print index and value of each element in (100, 200, 300, 400) using a loop.