## Python questions for solving

- 1. Write a Python program to reverse a string without using slicing.
- 2. Check if a given string is a palindrome or not.
- 3. Count vowels and consonants in a given string.
- 4. Write a function to find the first non-repeating character in a string.
- 5. Remove all duplicate characters from a string while maintaining order
- 6. Write a Python program to check whether a number is an Armstrong number or not.
- 7. Print all Armstrong numbers in a given range using a loop.
- 8. Check if a given number is a palindrome or not.
- 9. Find the largest palindrome number smaller than a given number
- 10. Reverse a list using recursion.
- 11. Find the second-largest number in a list without using sort.
- 12. Remove all occurrences of a specific element from a list without using remove().
- 13. Write a function to flatten a nested list (recursive).
- 14. Find the common elements in two lists without using set()
- 15. Write a recursive function to find the factorial of a number.

## Python -prog + theory

- 1. What is the difference between is and == in Python?
- 2. Write a Python program to check whether a number is even or odd.
- 3. What are Python's mutable and immutable data types? Give examples.
- 4. Write a program to reverse a string without using slicing ([::-1]).
- 5. What is the difference between break, continue, and pass?
- 6. Write a program to print all prime numbers between 1 and 50.
- 7. Explain the use of \*args and \*\*kwargs in function definitions.
- 8. Write a function to check if a string is a palindrome.
- 9. What are local and global variables in Python? How are they used?
- 10. Write a program to count the frequency of each character in a string.
- 11. What is a lambda function? Write an example using map() with lambda.12. Write a Python program to find the factorial of a number using recursion.
- 13. What is the difference between a list, tuple, and set in Python?
- 14. Write a program to find the largest and smallest elements in a list.
- 15. Explain exception handling in Python with try, except, and finally.
- 16. Write a program to remove duplicates from a list.
- 17. What is list comprehension? Give an example.
- 18. Write a Python program to check if a number is Armstrong or not.
- 19. What are Python modules and packages? How are they imported?
- 20. Write a Python program to sort a list of dictionaries by the value of a specific key.