

- 1) Write a Python program to convert a given list of tuples to a list of lists.
 Original list of tuples: [(1, 2), (2, 3), (3, 4)]
 Convert the said list of tuples to a list of lists: [[1, 2], [2, 3], [3, 4]]
 Original list of tuples: [(1, 2), (2, 3, 5), (3, 4), (2, 3, 4, 2)]
 Convert the said list of tuples to a list of lists: [[1, 2], [2, 3, 5], [3, 4], [2, 3, 4, 2]]

- 2) Write a Python program to compute the sum of all the elements of each tuple stored inside a list of tuples.
 Original list of tuples:
 [(1, 2), (2, 3), (3, 4)]
 Sum of all the elements of each tuple stored inside the said list of tuples:
 [3, 5, 7]
 Original list of tuples:
 [(1, 2, 6), (2, 3, -6), (3, 4), (2, 2, 2, 2)]
 Sum of all the elements of each tuple stored inside the said list of tuples:
 [9, -1, 7, 8]

- 3) Write a Python program to check if a specified element appears in a tuple of tuples.
 Original list:
 (('Red', 'White', 'Blue'), ('Green', 'Pink', 'Purple'), ('Orange', 'Yellow', 'Lime'))
 Check if White present in said tuple of tuples!
 True
 Check if White present in said tuple of tuples!
 True
 Check if Olive present in said tuple of tuples!
 False

- 4) Write a Python program to find the third largest number from a given list of numbers. Use the Python set data type.
- 5) Write a Python program to find all the unique combinations of 3 numbers from a given list of numbers, adding up to a target number.
- 6) Given two sets of numbers, write a Python program to find the missing numbers in the second set as compared to the first and vice versa. Use the Python set.

- 7) Write a Python program to count the number of even and odd numbers in a series of numbers
Sample numbers : numbers = (1, 2, 3, 4, 5, 6, 7, 8, 9)
Expected Output :
 Number of even numbers : 5
 Number of odd numbers : 4
- 8) Write a Python program to get the Fibonacci series between 0 and 50.

9) Write a Python program that iterates the integers from 1 to 50. For multiples of three print "Fizz" instead of the number and for multiples of five print "Buzz". For numbers that are multiples of three and five, print "FizzBuzz".

10) Write a Python program to check if a triangle is equilateral, isosceles or scalene.

11) Write a Python program to create the multiplication table (from 1 to 10) of a number.

12) Write a program to print the following pattern.

```
*  
  
* *  
  
* * *  
  
* * * *  
  
* * * * *
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13) Write a program to find GCD of two numbers. Write a program to find a Fibonacci of a number
Write a program to find a factorial of a number.

14) Write a program to find a minimum of three numbers. Write a program to check if the given strings are anagram or not. Write a program to check if the given number is Armstrong or not.

15) Write a program to check if the given number is palindrome or not

16) Write a [Python](#) program to find those numbers which are divisible by 7 and multiples of 5, between 1500 and 2700 (both included).

17) Write a Python program that accepts a string and calculates the number of digits and letters.

- 18) Write a [Python](#) program to find numbers between 100 and 400 (both included) where each digit of a number is an even number. The numbers obtained should be printed in a comma-separated sequence.
- 19) Write a Python program to create the multiplication table (from 1 to 10) of a number.
- 20) Write a Python program to get the sum of a non-negative integer using recursion.
- 21) Write a Python function to reverse a list at a specific location.)
- 22) Write a Python function find the length of the longest increasing sub-sequence in a list.
- 23) . Write a Python function that finds all the permutations of the members of a list.
- 24) Write a Python function to find the k^{th} smallest element in a list.
- 25) Write a Python function to find the k^{th} largest element in a list.
- 26) Write a Python function to check if a list is a palindrome or not. Return true otherwise false.
- 27) Write a Python a function to find the union and intersection of two lists.
- 28) Write a Python function to remove duplicates from a list while preserving the order.
- 29) Write a Python a function to find the maximum sum sub-sequence in a list. Return the maximum value.
- 30) Write a Python a function to find the minimum sum sub-sequence in a list. Return the sub-sequence.
- 31) Write a Python function to find the longest common sub-sequence in two lists.
- 32) Write a Python program to find the first non-repeated element in a list.
- 33) Write a [Python](#) script to sort (ascending and descending) a dictionary by value.
- 34) Write a Python script to add a key to a dictionary.
- 35) . Write a [Python](#) script to concatenate the following dictionaries to create a new one.
- 36) Write a Python script to check whether a given key already exists in a dictionary.
- 37) Write a Python program to iterate over dictionaries using for loops.
- 38) Write a [Python](#) script to generate and print a dictionary that contains a number (between 1 and n) in the form (x, x*x).
- 39) Write a [Python](#) script to print a dictionary where the keys are numbers between 1 and 15 (both included) and the values are the square of the keys.
- 40) Write a [Python](#) script to merge two Python dictionaries.
- 41) Write a Python program to iterate over dictionaries using for loops.

- 42) Write a Python program to sum all the items in a dictionary.
- 43) Write a Python program to multiply all the items in a dictionary.
- 44) Write a [Python](#) program to remove a key from a dictionary.
- 45) Write a Python program to map two lists into a dictionary.
- 46) Write a Python program to sort a given dictionary by key.
- 47) Write a Python program to get the maximum and minimum values of a dictionary.
- 48) Write a [Python](#) program to get a dictionary from an object's fields.
- 49) Write a Python program to remove duplicates from the dictionary.
- 50) Write a Python program to check if a dictionary is empty or not.
- 51) Write a Python class Employee with attributes like emp_id, emp_name, emp_salary, and emp_department and methods like calculate_emp_salary, emp_assign_department, and print_employee_details.
- 52) Write a [Python](#) class Restaurant with attributes like menu_items, book_table, and customer_orders, and methods like add_item_to_menu, book_tables, and customer_order. Perform the following tasks now:
 - Now add items to the menu. Make table reservations. Take customer orders. Print the menu. Print table reservations. Print customer orders.
- 53) Write a [Python](#) class BankAccount with attributes like account_number, balance, date_of_opening and customer_name, and methods like deposit, withdraw, and check_balance.
- 54) Write a Python class Inventory with attributes like item_id, item_name, stock_count, and price, and methods like add_item, update_item, and check_item_details. Use a dictionary to store the item details, where the key is the item_id and the value is a dictionary containing the item_name, stock_count, and price.
- 55) Write a [Python](#) program to create a lambda function that adds 15 to a given number passed in as an argument, also create a lambda function that multiplies argument x with argument y and prints the result.
- 56) Write a [Python](#) program to create a function that takes one argument, and that argument will be multiplied with an unknown given number.

- 57) Write a Python program to find the second lowest total marks of any student(s) from the given names and marks of each student using lists and lambda. Input the number of students, the names and grades of each student.
- 58) Write a [Python](#) program to find the numbers in a given string and store them in a list. Afterward, display the numbers that are longer than the length of the list in sorted form. Use the lambda function to solve the problem.
- 59) Write a Pandas program to create a dataframe from a dictionary and display it.
- 60) Write a Pandas program to create and display a DataFrame from a specified dictionary data which has the index labels.
- 61) Write a Pandas program to display a summary of the basic information about a specified DataFrame and its data.
- 62) Write a Pandas program to select the 'name' and 'score' columns from the following DataFrame.
- 63) . Write a Pandas program to calculate the mean of all students' scores. Data is stored in a dataframe.