

1. Solve the algebraic equations.
2. Compute largest / smallest / 2nd largest / 2nd smallest element from a list.
3. Check if a given key already exists in a dictionary or not.
4. Check whether a number is “Strong” or not.
5. Reverse a tuple.
6. Merge two dictionaries.
7. Check whether a string is “Palindrome” or not.
8. Marks of five different students are given. Implement a bar chart of those five students.
9. Concatenate two dictionaries to create a new one.
10. Check whether a number is “Perfect” or not.
11. Find largest odd & smallest even number from a list.
12. Sum all the items in a dictionary.
13. Check whether a number is “Armstrong” or not.
14. Map two lists into a dictionary.
15. Copy the contents of a file to another file.
16. Check whether a number is “Kaprekar” or not.
17. Find even and odd elements from a list and append them in different list.
18. Read a file line by line and store it into a list.
19. Compute row-wise maximum and column wise minimum number using numpy.
20. Merge two sorted lists to create a new list.
21. Count number of vowels from a file.
22. Plot a sine wave.
23. Unzip a list of tuples into individual lists.
24. Combine two dictionary adding values for common keys.
25. Compute determinant and transpose of a matrix using numpy.
26. Compute Union, intersection of sets without using library functions (or operators).
27. Swap the First and Last Value of a List.
28. Plot a line using the following coordinates of x and y { x = [2, 6, 9, 1] and y = [8, 3, 7, 1].}
29. Sort the elements of a list using bubble sort.
30. Sort a list alphabetically in a dictionary.
31. Compute matrix addition and multiplication using Numpy.
32. Find the number of integers from 1 to n are multiplies of 2 and 3.
33. Input a String and replace every blank Space with Hyphen.
34. Take in the Marks of 5 Subjects and Display the Grade.
35. Compute Union, intersection and set difference using library functions (or operators).
36. Check if a Number is a Palindrome
37. Create dictionaries of 4 student’s marks given below. Show the Student who get maximum total marks.

Student	Physics	Chemistry	Mathematics

38. Check whether an element exists within a tuple or not.
39. Remove newline characters from a file.

40. Out of 100 students of your class 70 students was born on 1999, 20 students were born on 1998 and 10 students was born on 2000. Write a python program to show this data values using pie chart.
41. Replace each value with its sum of digits in a dictionary.
42. Compute addition, average and factorial of each element of a list.
43. Compute Prime Factors of an Integer.
44. Find whether an element is present or not in a list.
45. Count the number of words in a text file.
46. Factorial of a Number Using Recursion
47. Create dictionaries of 4 students Sourav, Sachin, Rahul and Anil. Find the average marks of all students in Chemistry.

Student	Physics	Chemistry	Mathematics

48. Append text to a file and display the text.
49. Find the Fibonacci Series Using Recursion.
50. Delete duplicate elements from a list.
51. Calculate the Length of a String Without Using a Library Function.
52. Find the Power of a Number Using Recursion.
53. Count the number of lines in a text file.
54. Sort (ascending and descending) a dictionary by value.
55. Print the GCD of two numbers.
56. Create dictionaries of 4 students S1, S2, S3, S4. Find who get maximum marks in physics.

Student	Physics	Chemistry	Mathematics

57. Read first n lines of a file.
58. Show scatter plot using the following values of x and y. x = [2,6,9,1,8,10,7,5] and y = [8,3,7,1,9,5,2,6].
59. Find the longest words from a file.
60. Find the repeated items of a tuple.