

Assignment-5

1. Write a Python script to make a GUI-based GST Tax Finder Calculator which takes original cost and net price as an input from the user and display the GST result.

Note: Calculate GST using formula:

$$\text{GST rate} = ((\text{Net Price} - \text{original cost}) * 100) / \text{original cost}$$

2. Write a Python script to create a GUI-based Calendar application using Tkinter module that display the calendar with respect to the year entered by the user.

Note: import Calendar library.

3. Write a Python script to create a GUI-based calculator using Tkinter module, which can perform basic arithmetic operations addition, subtraction, multiplication, and division.
4. Write a Python Script to create a list of marks for n number of students entered by the user. Sort the input list using merge/Quick sort algorithm and print the final sorted List.

For e.g.: List entered by the user [23, 12, 33, 34]

List after sorting is: [12, 23, 33, 34]

5. Write a Python Script to create an integer array containing duplicates entered by the user and then perform the following:
 - a. Sort the inputted array.
 - b. Using binary search algorithm Search the element entered by the user in the sorted array list (if the element is not present, print an error message)
 - c. Count the number of occurrences of that element.

For e.g. : Input array : [4,5,2,4,5,6,2,3,4,5,7]

Sorted array : [2,2,3,4,4,4,5,5,5,6,7]

Number of occurrences of element 4 is: 3