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Lab Cycle 1				
1	Write a program that prompts the user to enter his first name and last name and then displays a message “Greetings!!! First name Last name”.	25/09/2023	1	
2	Write a program to demonstrate different number data types in python?	25/09/2023	2	
3	Write a program to calculate the area of a circle by reading inputs from the user.	25/09/2023	3	
4	Write a program to calculate the volum of a sphere by reading inputs from the user.	25/09/2023	4	
5	Write a program to calculate the salary of an employee given his basic pay (to be entered by theuser). HRA = 10 percent of the basic pay, TA = 5 percent of the basic pay.	25/09/2023	5	
6	Write a Python program to perform arithmetic operations on two integer numbers.	25/09/2023	6	
7	Write a Python program to get a string which is n (non-negative integer) copies of a given string.	7/10/2023	7	
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9	Accept an integer n and compute n+nn+nnn.	7/10/2023	9	
10	Create a string from the given string where the first and last character are exchanged.	7/10/2023	10	
11	Write a program to prompt the user for a list of integers. For all values greater than 100, store ‘over’ instead.	7/10/2023	11	
12	Store a list of first names. Count the occurrences of ‘a’ within the list.	7/10/2023	13	
13	Write a program to prompt the user to enter two lists of integers and check (a) Whether lists are of the same length. (b)Whether the list sums to the same value. (c) Whether any value occurs in both Lists.	12/10/2023	14	

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14	Write a Python program to count the occurrences of each word in a line of text.	12/10/2023	16	
15	Get a string from an input string where all occurrences of the first character are replaced with '\$', except the first character.	12/10/2023	17	
16	Create a single string separated with space from two strings by swapping the character at position 1.	12/10/2023	18	
17	Write a python program to read two lists color-list1 and color-list2. Print out all colors from color-list1 not contained in color-list2.	12/10/2023	19	
18	Create a list of colors from comma-separated color names entered by the user. Display first and last colors.	12/10/2023	20	
19	From a list of integers, create a list after removing even numbers.	12/10/2023	21	
20	Count the number of characters (character frequency) in a string.	26/10/2023	23	
21	Add 'ing' at the end of a given string. If it already ends with 'ing', then add 'ly'	26/10/2023	24	
22	Accept a list of words and return the length of the longest word.	26/10/2023	25	
23	List comprehensions	26/10/2023	26	
24	Sort dictionary in ascending and descending order.	26/10/2023	28	
25	Merge two dictionaries	26/10/2023	30	
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26	Write a program to find the factorial of a number.	26/10/2023	32	
27	Write a program to generate Fibonacci series of N terms.	26/10/2023	33	
28	Write a program to find the sum of all items in a list. [Using for loop]	26/10/2023	34	
29	Generate a list of four-digit numbers in a given range with all their digits even and the number is a perfect square.	06/11/2023	35	

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31	Display the given pyramid with the step number accepted from the user.	06/11/2023	37	
32	Write a program to generate all factors of a number. [use while loop]	06/11/2023	38	
33	Write a program to print the reverse of a number. [use while loop]	06/11/2023	39	
34	Write a program to find whether the given number is an Armstrong number or not. [use while loop]	06/11/2023	40	
35	Display star pattern using nested loop	06/11/2023	41	
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36	Write a program using functions to calculate the simple interest. Suppose the customer is a senior citizen. He is being offered a 12 percent rate of interest, for all other customers, the rate of interest is 10 percent.	06/11/2023	42	
37	Write a program using functions and return statements to check whether a number is even or odd.	16/11/2023	43	
38	Write a function called compare which takes two strings S1 and S2 and an integer n as arguments. The function should return True if the first n characters of both the strings are the same else the function should return False.	16/11/2023	44	
39	Write a program to print the Fibonacci series using recursion.	16/11/2023	45	
40	Write a program to add variable length integer arguments passed to the function.	16/11/2023	46	
41	Write lambda functions to find the area of square, rectangle and triangle.	16/11/2023	48	
42	Write a program to display powers of 2 using anonymous function.	23/11/2023	50	
43	Write a program to sum the series $1/1! + 4/2! + 27/3! + \dots + \text{nth term}$.	23/11/2023	51	

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Lab Cycle 5				
44	Write a program to determine whether a given year is a leap year [Use Calendar Module]	23/11/2023	52	
45	Python Modules: time and datetime Module	23/11/2023	53	
46	Write a python program to print yesterday, today and tomorrow.	30/11/2023	55	
47	Write a function in file Armstrong.py to check whether a number is an Armstrong number. Import the module to generate Armstrong numbers between two limits.	30/11/2023	56	
48	Create a package graphics with modules rectangle, circle and sub-package 3D-graphics with modules cuboid and sphere. Include methods to find area and perimeter of respective figures in each module. Write programs that find the area and perimeter of figures by different importing statements. (Include selective import of modules and import * statements)	08/12/2023	58	
Lab Cycle 6				
49	Define a class to represent a bank account. Include the following details like name of the depositor, account number, type of account, balance amount in the account. Write methods to assign initial values, to deposit an amount, withdraw an amount after checking the balance, to display details such as name, account number, account type and balance.	08/12/2023	61	
50	Create a class Publisher with attributes publisher id and publisher name. Derive class Book from Publisher with attributes title and author. Derive class Python from Book with attributes price and no_of_pages. Write a program that displays information about a Python book. Use base class constructor invocation and method overriding.	08/12/2023	63	
51	Write a program that has an abstract class Polygon. Derive two classes Rectangle and Triangle from Polygon and write methods to get the details of their dimensions and hence	15/12/2023	65	

	calculate the area.			
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52	Create a Rectangle class with attributes length and breadth and methods to find area and perimeter. Compare two Rectangle objects by their area.	15/12/2023	67	
53	Create a class Time with private attributes hour, minute and second. Overload '+' operator to find sum of 2 times.	15/12/2023	69	
54	Write a program that validates name and age as entered by the user to determine whether the person can cast a vote or not.	15/12/2023	71	
55	Write a program that prompts the user to enter a number. If the number is positive or zero print it, otherwise raise a 'ValueError' Exception.	04/01/2024	73	
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57	Python program to copy odd lines of one file to other.	04/01/2024	75	