

**SHREE SWAMI ATMANAND SARASWATI
INSTITUTE OF TECHNOLOGY
INTEGRATED MLC IT DEPARTMENT**



Laboratory Plan

Faculty Name: Prof. Neha Surti

Subject Name & Code: Python Programming-1 (1350505)

Class: 3rd Year (5th Semester-31)

Academic Year: 2025-26.

Batch: A

Term Duration: 30-06-2025 to 17-10-2025

Sr.No	List of Experiment	Plan Date	Actual Date
1	Write a python program to implement simple calculator(should include addition, subtraction, multiplication, division, floor division and exponent operation)		
2	Demonstrate use of type() and id() function with different data types of python.		
3	Write a program to find those numbers which are divisible by 5 and multiplication of 3, between 200 and 400 (both are included).		
4	Write a program to print the extension of the given filename.		
5	Write a program to print 1 st and last colour from the given list. List1=['red', 'blue', 'green', 'yellow', 'white', 'black']		
6	Write a program to check whether an alphabet is a vowel or consonant. Take the input character from the user.		
7	Write a python program to generate empty list and perform <ul style="list-style-type: none"> • insertion of elements in it using append(), extend() and insert() • print length of list, value of element located at index 2, occurrences of element located at index 2 and print reverse list • Check whether specific value is available in list using membership operator • Deletion of elements using pop(), remove() and clear() methods 		
8	Write a python program to generate tuple of integer values and print it's length, summation of all elements of tuple, minimum value from tuple, maximum value from tuple and also print tuple in sorted order.		
9	Write a python program to generate empty dictionary and perform following operations on it.		

	<ul style="list-style-type: none"> • add values in it with keys. • print dictionary • Get value of specific key (if key not found then default value should be returned) • Sort content of dictionary 		
10	Write a python program function to generate all the factors of number. (number is entered by user).		
11	Write a program which iterates the integers from 1 to 10. For multiplication of 4 print "computer" instead of the number and for multiplication of 5 print "Department". For numbers which are multiples of both 4 and 5 print "Computer Department".		
12	<p>Write a program to perform following Operation:</p> <ul style="list-style-type: none"> • Print the digits from 1 to 20 in the form of list. (using range()) • Print all the even numbers from the above list. 		
13	Write a Python program to add 'ing' at the end of the given string (length should be at least 3). If the given string is already ends with 'ing' then add 'ly' instead. If the string length of the given string is less than 3, leave it unchanged.		
14	Write a program to find the factorial of given number using recursive function.		
15	Write a python function to calculate the sum of three given numbers, if the values are equal then returns trice of their sum.		
16	Write a program to generate Fibonacci series for N terms using function.		
17	Write a python program to perform the following operation for addition, subtraction, multiplication, division and modulo using function.		
18	Write a python program to print the length of each line in the file.		
19	Write a python program to print first 15 bytes from file using with open.		
20	<p>Draw a graph which satisfied following condition.</p> <ul style="list-style-type: none"> • $x = \text{range}(10)$ • $y = \cos(x)$ • graph should be "dot-dashed" • Give the label to x-axis "this is X dimension" • Give the label to y-axis "this is Y dimension" • Give the Title to graph "This is My First Graph" 		
21	<p>Draw a graph which satisfied following condition given practical.</p> <ul style="list-style-type: none"> • Give the limit to x-axis (-2,12) • Give the limit to y-axis (-2,2) <p>Display Annotation</p>		

22	Plot Line plot with formatting to display two student's data with last 4 semester SPI. also use legend in plot , different line styles and marker characters.		
23	Write a python program to do line plotting, scatter plotting, Bar chart, box plot , histogram and pie chart.		
24	Write Python program to plot time series with trends of sales.		
25	Write a python program to Generate directed and undirected graph.		
26	Python Program demonstrate following: <ul style="list-style-type: none"> • Read content of text file using uploading, streaming and sampling methods from "Colors.txt" file • Read Content of CSV file • Read data from Excel sheet 		
27	Write a python program to plot image and display its information. Generate another image from previous image by cropping it.		
27	Write a python program to define a module and import a specific function in that module to another program.		
30	Write a program to print each line of a file in reverse order. Write a program to compute the number of characters, words and lines in a file		
31	Write a program to compute the number of characters, words and lines in a file		
32	Write a python program to demonstrate searching algorithm.		
33	Write a python program to perform different sorting algorithm.		
Total Number of Experiment:		33	
Total Number of Laboratory Conducted:			
Total Number of Experiment Conducted:			

Prof. Neha Surti
Subject Faculty

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(Signature)
11/7/25.
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