

Sr. No.	Experiments Name
1	1a. Write a Python program to do arithmetical operations addition and division, subtraction and multiplication. 1b. Write a Python program to find the area of a triangle?
2	Write a program to display prime numbers series.
3	Write a program to generate Fibonacci number series.
4	Write a Python program that creates two sets <b>set1</b> and <b>set2</b> . Write a function called <b>common_elements()</b> that takes two sets as input and returns a set of the common elements.
5	A Python program to storing student's marks into a dictionary and finding total marks and percentage of marks.
6	3 Write a program to perform string operation.  Take long String s = "my name is Abc Xyz, name of org is RAIT"  a. find all location of "name" substring b. make entire string lower case c. count no. of 'a' in entire string d. print location of all 'a' characters in a string e. replace all 'a' with ' RAIT' f. put all words as seperate element in list
7	A Python program that uses the function of employee module and calculates the gross and net salaries of an employee.
8	Write a Python program to create a list of integers and find the second maximum values in the list.
9	Write a Python program to create a list of elements consist of integers, float, string, complex etc. and print the sum of all the integers in the list.
10	A Python program using user id to create a dictionary with cricket players name and scores in a match and retrieve runs by entering the player's name.
11	Write a python program to that accepts length of three sides of a triangle as inputs. The program should indicate whether or not the triangle is a right-angled triangle (use Pythagorean theorem).
12	Write a Python function that takes a tuple of integers as input and returns a new tuple with the same integers, but with each integer squared.
13	Python Program to Find the Area of a Rectangle Using Class, methods and constructor.

14	Write a Python program to create a class hierarchy using multiple inheritance. The hierarchy should include a base class called <b>Shape</b> , and two derived classes called <b>Circle</b> and <b>Square</b> . Both <b>Circle</b> and <b>Square</b> should inherit from <b>Shape</b> . <b>Circle</b> should have a method called <b>area()</b> that calculates and returns the area of the circle, while <b>Square</b> should have a method called <b>perimeter()</b> that calculates and returns the perimeter of the square.
15	Write a program to calculate the area of the cube using method overloading operations.
16	Write a Python program to create a module called <b>calculator</b> that contains a class called <b>Calculator</b> . <b>Calculator</b> should have four methods called <b>add()</b> , <b>subtract()</b> , <b>multiply()</b> , and <b>divide()</b> , which perform the corresponding arithmetic operations on two numbers.
17	Write a Python program to create a package called <b>shapes</b> that contains two modules called <b>circle</b> and <b>rectangle</b> . <b>circle</b> should have a class called <b>Circle</b> that takes a radius as input and has a method called <b>area()</b> that calculates and returns the area of the circle, while <b>rectangle</b> should have a class called <b>Rectangle</b> that takes the length and width as input and has a method called <b>area()</b> that calculates and returns the area of the rectangle.
18	Write a Python program that defines a function called <b>calculate_grade()</b> that takes a numerical score as input and returns a letter grade. Handle the <b>ValueError</b> exception and print a custom error message if the user inputs a non-numeric value. (use try-except-finally)
19	Write a Python program that reads a file called <b>input.txt</b> and creates a new file called <b>output.txt</b> with the same contents as input.txt, but with all vowels removed.
20	A Python program to show method overloading to find sum of two or three numbers.
21	A Python program to display even numbers 100 and 200.
22	Write a python program to that accepts length of three sides of a triangle as inputs. The program should indicate whether or not the triangle is a right-angled triangle (use Pythagorean theorem).
23	a Write a python program to convert temperature to and from Celsius to fahrenheit. b. Write a Python program to swap two variables?