Lab Assessment 1

1. WAP to greeting user and display his/her name

2. Write a program that asks the user for his/her name and then welcomes him/her

3. WAP to demonstrate arithmetic operators

4. Write a program that prompts the user to enter two integers and display their sum on the screen

5. Write a program that prompts the user to input a Celsius temperature and outputs the equivalent temperature in Fahrenheit. The formula to convert the temperature is: F = 9/5 C + 32 where F is the Fahrenheit temperature and C is the Celsius temperature.

6. WAP which accept principle, rate and time from user and print the simple interest. The formula to calculate simple interest is: simple interest = (principle * rate * time) / 100

7. Write a program that prompts the user to input a number and display if the number is even or odd

8. WAP to find area of rectangle

9. Write a program that prompts the user to input the radius of a circle and outputs the area and circumference of the circle. The formula is
   Area = pi * radius2
   Circumference = 2 * pi * radius

10. Write a program that prompts the user to input the length and the width of a rectangle and outputs the area and perimeter of the rectangle. The formula is

Area = Length * Width

Circumference = 2 * (Length + Width)

11. Write a program which prompts the user to input principle, rate and time and calculate compound interest. The formula is :

CI = P(1+R/100)^T - P

Lab Assessment 2

12. Write a program that accepts seconds from keyboard as integer. Your program should converts seconds in hours, minutes and seconds. Your output should like this :

Enter seconds: 13400

Hours: 3

Minutes: 43

Seconds: 20

12. Write a program that prompts the user to enter number in two variables and swap the contents of the variables.

14. Write a program that prompts the user to enter number in two variables and swap the contents of the variables

15. WAP to find the ASCII Value of entered character

16. Write a program to generate the following output :

    5 10 9

17. WAP to print the volume of a cylinder when radius and height of the cylinder is given by user

18. WAP that asks your height in centimeters and converts it into foot and inches.

19. Write a Python program to accept 3 sides of triangle and find the area of triangle

20.WAP to convert dollars in Rupee

21. WAP to convert kilometers to miles

22. WAP that inputs an age and print age after 10 years

Lab Assessment 3

23. Write a Python program that takes an age as input and determines whether a person is eligible to vote. If the age is 18 or above, print "You are eligible to vote." Otherwise, print "You are not eligible to vote yet."

24. Write a program that prompts the user to input two integers and outputs the largest.

25. Write a program that prompts the user to enter a number and determines whether it is positive, negative, or zero. The program should print "Positive" if the number is greater than 0, "Negative" if the number is less than 0, and "Zero" if the number is 0.

26. Write a program that prompts the user to enter their age and prints the corresponding age group. The program should use the following age groups:

0-12:	Child
13-19:	Teenager
20-59:	Adult
60 and above:	Senior Citizen

27. Write a program that prompts the user to input a number from 1 to 7. The program should display the corresponding day for the given number. For example, if the user types 1, the output should be Sunday. If the user types 7, the output should be Saturday. If the number is not between 1 to 7 user should get error message

28. Write a program that prompts the user to enter their weight (in kilograms) and height (in meters). The program should calculate the Body Mass Index (BMI) using the formula: BMI = weight / (height * height). The program should then classify the BMI into one of the following categories:

less than 18.5 - Underweight

BMI between 18.5 and 24.9 - Normal weight

BMI between 25 and 29.9 - Overweight

BMI 30 or greater - Obesity

29. The marks obtained by a student in 3 different subjects are input by the user. Your program should calculate the average of subjects and display the grade. The student gets a grade as per the following rules

Average	Grade
90-100	A
80-89	B
70-79	C
60-69	D
0-59	F

30. Write a program that prompts the user to input a character and determine the character is vowel or consonant

31. Write a Python program to print larger number using swap

Lab Assessment 4

32. WAP to find the 2nd largest number from the list of the numbers entered through keyboard.

33. Python program to read marks of six subjects and to print the marks scored in each subject and show the total marks

34. Python program to read prices of 5 items in a list and then display sum of all the prices, product of all the prices and find the average

35. Write a program to generate in the Fibonacci series and store it in a list. Then find the sum of all values.

36. WAP to find minimum element from a list of elements along with its index in the list.

37. Write a program to create a list of numbers in the range 1 to 10. Then delete all the even numbers from the list and print the final list.

Lab Assessment 5

38. Python credit card program

39. Write a program to input any number and to find reverse of that number.

40. Write a python program to accept a integer number and count the number of digits in number.

41. Write a program to convert decimal number to binary.

42. WAP that searches for prime numbers from 15 through 25.

43. WAP to test if given number is prime or not.

44. WAP to print first n odd numbers in descending order.

45. WAP to find the sum of first n even numbers.

46. WAP to find the sum of first n odd numbers.

47. WAP a program to generate a list of elements of Fibonacci Series.

48. Display a multiplication table

49. Implement a sequential search

50. Implement selection sort

Lab Assessment 6

51. WAP that repeatedly asks the user to enter product names and prices. Store all of them in a dictionary whose keys are product names and values are prices. And also write a code to search an item from the dictionary.

52. Write a Python program to enter names of employees and their salaries as input and store them in a dictionary

53. WAP to create a dictionary named year whose keys are month names and values are their corresponding number of days.

54. Write a program to swap two values using tuple assignment

55. Write a Python program that create a tuple storing first 9 terms of Fibonacci series

56. Write a program to create a nested tuple to store roll number, name and marks of students.

57. Write program to find the sum of factorial upto n terms

58. Write a Python program to input any number and check number is Palindrome or Not using Function

59. Write a Python program to create a function for factorial value