1. Write a Python Program to implement concurrent programming using multi-processing module

2. Print the even numbers and odd numbers from the list of numbers [2,7,9,12,18,15,42,53,44,15, 19,20] using imperative programming

3. Write a Python program to implement left click and right click events

4. Write a Python Program to implement parallel processing using multi-processing module

5. Write the python program to return the numbers divisible by 2 from the input list = [21, 24, 12, 34, 10, 15, 41] using lambda and filter function

6. Write a program using tkinter module to implement employee salary calculation using python. Input the employee name and the basic salary calculate and display the net salary using following condition.

    (i)if the basic salary is more than 50000 then include 10% tax.

    (ii)if the basic salary is more than 30000 then include 5% tax.

7. Develop a python program that get the student details such as Student id, Student name in class Student and get the Mark1, Mark2. Create a new Class Result and calculate Total and Average, inheriting the mark from Class Student, and display both Marks, Total and Average from Result class

8. Write python code to implement dependent type programming by checking every key value pair in a dictionary and find if they match with name: email format

9. Design a student information system which consists of name, register number, email-id, department, five subject names and marks for each subjects and calculate Average marks.

    Requirements:

    (i) Add check button to select subjects and department and add entry buttons for getting name, registration number, email-id from the user.

    ii)Make use of Grid to arrange all the widgets and display Average marks in label box.

10. Write a Python Program to implement parallel processing using multi-threading.

11. Write a program to implement Compound Interest

12. Write the python program to solve 8 Queens problem using pyDatalog

13. Write a program using pyDatalog to calculate the factorial of a number

14. Write a Python function to check whether a string is a pangram or not.

15. Write a program in Python to implement Synchronization using Lock.

16. Write a program to develop a payroll calculator for school using python. The user input starts by asking for your name or "0" to quit the program, hours worked and pay rate. Extra salary will be provided for over time according to the decision of admin

17. Write a Python program to implement mouse events.

18. Write the Python program to add two lists of input [7,8,1,2,3,4,5] and [3,4,1,29,1,5,1] using map and lambda and then perform multiplication for the resultant value off add

with the input list [4,1,69,2,7,3,6]

19. Develop a python code to display the items with duplicate elements and print the Number of items in the tuple.

20. Write a Python program to implement race condition.

21. Write the commands to find derivative, integration, limits, and quadratic equation in symbolic programs.

22. Write a Python Program to create an Employee table that consists of 4 columns (EmpNum, Name, Designation, Salary) using sqlite3 (i) Insert five records into the table (ii) Select only employee Arun details and display(iii) Update Elango's salary to 30000

23. Write the python program to map values to a function using pyDatalog

24. There are 50 computers available in computer programming lab where each computer is used six hours per day. Write a Python program using classes and objects that contain getDetail() for getting input from user,calculatesecondperDay() for calculating the usage of each computer in seconds per day, calculateminutesperWeek() for calculating the usage of each computer in minutes per week ,calculatehourperMonth() for calculating usage of each computer in hour per month and calculatedayperYear() for calculating usage of each computer in day per year.

25. Write a Python Program to implement a UDP Server and a UDP Client. A message "Welcome to Network Programming" must be sent by the Server and displayed by the Client.

26. Write a Python Program to implement a TCP Server and a TCP Client. A message "Welcome to Network Programming" must be sent by the Server and displayed by the Client.

27. Write a program to iterate between 10 to 20 and to display prime numbers

28. Write a python program to create a Class "Shape" with two data members: length, breadth and two classes namely, rectangle, square and cube following inheritance. Methods to be inherited from class Shape: area (). Display the area of Rectangle and Square

29. Write a Python Program to create a student table that consists of 4 columns (Reg.Num., Name, Branch and CGPA) using sqlite3 and to insert five records into the table.
    a. Select the topper of the class based on the CGPA and display
    b. Sort the records based on CGPA using OrderBy Clause
    c. Delete the last record entered and display the remaining records.

30. Write a program to build a Bank account with deposit and withdraw operations using class and objects.

31. Write a Python program to convert DFA to NFA.

32. Write a Python Program to create a Books table that consists of 4 columns (ISBN num, Name of the book, Author name, Genre) using sqlite3. (i) Insert five records into the table (ii) Select only Computer Science Books and display. (iii) Insert a new book "1006, Python Programming, ReemaThareja, Computer science"

33. Write a Python program to convert NFA to DFA

34. Find the total and sum of 10 numbers [2,4,5,8,12,14,18,20,25,29] using python programming by supporting imperative program paradigm

35. Write a Python Program to create a Marks table that consists of 4 columns (RegNum, English, Math, Science) using sqlite3.
    a. Insert five records into the table
    b. Filter and display students who have scored above 75 in Math
    c. Update the marks of students who scored less than 50 in English as 55.

36. Write a Python Program to implement a UDP Server and a UDP Client. Display the IP address of the Client by the Server.

37. Write a Python Program to create an Employee table that consists of 4 columns (EmpNum, Name, Designation, Salary) using sqlite3. (i)Insert five records into the table (ii)Update Salary for both Assistants as 12500 (iii) Order the records based on the Salary and display the records

38. Write a program to reverse a given integer

39. Write a program using pyDatalog with the following rules and facts
    Lucy is a professor
    Danny is a professor
    James is a Lecturer
    All professors are Dean
    Write a Query to retrieve all deans?