1. Write a program that accepts a string from the user and display the same string after replacing spaces with #.

2. Explain types of arguments in function with example.

3. Desoribe instance variable. static variable and local variables in python object oriented programming. Use suitable examples.

4. State the Difference between List and tuple. Explain with Example

5. Demonstrate lambda function with example

6. Create a class called AccountHolder with data attributes like acc number, balance, and typeOfAccount. The methods of the class should include

    1. getData() - acc number, name, Balance.

    2.Calculate Intrest) - to accept Rate of Interest from user and calculate interest on account balance and display it.

    3. Display the all account information

7. Write a program to Accept the file name from user and print the number of lines, 21 words and characters present in the given file?.

8. Illustrate CRUD operations in MongoDB with example state the difference between SQL Database and NoSQL Database.

9. Write a program to check whether entered file is exist or not and handle the -exception

10. Develop a python program to remove all the comments from .py file. Accept the File Name from User

11. Write a Python program to perform following operations on MongoDB Database. [S] Create Collection "Student”

    1. Insert 5 documnents in Collection STUDENT with fields - Stud name, Stud mobile, Stud Class, Stud Age, Stud Marks

    2. Find the Student having age >25

    3. Increase Marks by 10%, for the Students having Marks" between 30 to 39

    4. Update Mobile number for any one Student

    5. Display all Students in descending the order of Age.

12. Write a program to find the nth Fibonacci number using recursion

13. Write A program to demonstrate various ways of creating Thrcad in Python

14. Write a Python Program to Check the weather enter password is valid or NOT. The PasSword Should Satisfy the Following Criteria: Minimum length with 8 characters and contains at least 1 Uppercase letter, 1 Lower case letter l digit 0-9 and 1 Special character.

15. Explain Generators in Python with suitable example.

16. Write a Program for synchronization of threads. Accept the Nnumber from user [4] and print odd and even numbers from 0 to Nusing both the threads simultaneously

17. Write a Python program A) Write a Program for synchronization of threads. Accept the Nnumber from user and print odd and even numbers from 0 to Nusing both the threads simultaneously. 1. To remove all leading zeros' fom an IP address. Accept IP address from 2. To find all five characters long word in a string. Accept string from user

18. Explain Decorators in Python with suitable example

19. Explain NumPy indexing and slicing methods with examples.

20. Draw a graph using matplotlib and decorate it by adding various elements

21. Prepare the pandas data frame from csv file . Perform following operations on 1. Fill all NaN' Values with the mean of each colum on 2. Display a last 15 rows.

22. Explain Constructors in Python with example

23. Write a Program to illustrate following numpy array attributes/Functions. ndarray.shape np.identity0 np.arange) np.reval0

24. Explain Multilevel inheritance in python with suitable example.

25. Draw Line graph using matplotlib and decorate it by adding various elements. Use suitable data.

26. Write a Python program, to check the validity of a password given by

The password should satisfy following criteria:

Contain at least fletter between a and z

Contain at least 1 number between 0 and 9 il) Contain at least 1 letter between A and Z iv) Contain at least 1 character from $, #, @

v) Minimum length of password: 8

vi) Maximum length of password: 20

27. Write a program for synchronization of threads using RLOCK. Accept the two numbers from user and calculate factorial of both numbers Simultaneonly

28. Draw bargraph using matplotlib and decorate it by adding various elements

29. What is NoSQL database? Compare SQL Vs NoSQL .

30. Write a program to find the sum of all Odd and Even numbers up to

a number specified by the user

31. Draw line graph using matplot lib and decorate it by adding various elements . use suitable data

32. Explain multiple inheritance in python with suitable example