**LIST OF PRACTICALS**

**Ruled Side**

**Write with Pen**

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| **Sr**  **No.** | **OBJECTIVE** | **REMARK** |
| **PYTHON PROGRAMMING** | | |
| 1) | Write a Python program to implement a stack using list. |  |
| 2) | Read a text file line by line and display each word separated by a #. |  |
| 3) | Create a CSV file by entering user-id and password, read and search the password for given userid. |  |
| 4) | Read a text file and display the amount of vowels / consonants / uppercase / lowercase characters in the file. |  |
| 5) | Write a Python program to count the number of words in a text file |  |
| 6) | Remove all the lines that contain the character 'a' in a file and write it to another file. |  |
| 7) | Create a Python program to find the longest word in a text file |  |
| 8) | Create a binary file with name and roll number. Search for a given roll number and display the name, if not found display appropriate message. |  |
| 9) | Write a Python program to calculate the average length of words in a text file |  |
| 10) | Create a Python program to check if a given word is present in a text file |  |
| 11) | Write a random number generator that generates random numbers between 1 and 6 (simulates dice). |  |
| 12) | Write a Python program to capitalize the first letter of each word in a text file |  |
| 13) | Create a Python program to sort the words in a text file alphabetically |  |
| 14) | Write a Python program to find and replace a specific word in a text file with another word |  |
| 15) | Create a Python program to reverse the contents of a text file |  |
| **MYSQL** | | |
| 16) | Write a Python program to integrate SQL with Python by importing the MySQL.Connector module. Connect to a MySQL database, execute a simple query to fetch data from the student table, and display the results. |  |
| 17) | Create a Python program to establish a connection with a MySQL database and create a student table. Insert some sample data into the table. |  |
| 18) | Write a Python program to alter the student table by adding a new attribute. Then, modify the data type of an existing attribute. |  |
| 19) | Create a Python program to update the student table to modify the data of a specific student. |  |
| 20) | Create a student table and insert data. Implement the following SQL commands on the student table:  a. ALTER table to add new attributes / modify data type / drop attribute.  b. UPDATE table to modify data.  c. ORDER By to display data in ascending / descending order.  d. DELETE to remove tuple(s)  e. GROUP BY and find the min, max, sum, count and average. |  |
| 21) | Develop a Python program to connect to a MySQL database and retrieve all the student records from the student table. Display this information in a tabular format. |  |
| 22) | Write a Python program to allow the user to search for a specific student by their roll number in the student table. Display the student's details if found, or an appropriate message if not found. |  |
| 23) | Create a Python program to update the marks of a specific student in the student table based on their roll number. Prompt the user to input the roll number and new marks for the student and update the record accordingly in the database. |  |