



SANA MODEL SCHOOL

PRACTICAL LAB LIST

Class : XII

Sub : Computer Science

1. Write a menu driven Python Program to perform Arithmetic operations (+, -, *, /) based on the user's choice.
2. Write a Python Program to display Fibonacci Series up to 'n' numbers.
3. Write a Python program to generate random number between 1 to 6 to simulate the dice.
4. Write a Python program to count vowels in an inputted string.
5. Write a Python program to display the sum of even numbers of a list.
6. Write a Python program to find a Factorial of a number inputted by the user.
7. Write a menu driven Python Program to find Area of Circle, Rectangle and Triangle.
8. Write a Python program to implement python mathematical functions to find:
 - i) To find Square of a Number,
 - ii) To find Log of a Number (i.e. Log10),
 - iii) To find Quad of a Number.
9. Write a Python Program to read a text file "Story.txt" and displays the number of Vowels/ Consonants/ Lowercase / Uppercase/characters in the file.
10. Write a Python Program to count the occurrences of the words "He" or "She" from the text file "Info.txt" .
11. Write a Python Program to Read a text file "Story.txt" line by line and display each word separated by '#'.
12. Write a python program to read lines from a text file "Sample.txt" and copy those lines into another file which are starting with an alphabet 'a' or 'A'.
13. Write a Python Program to Create a binary file with Empno, Name, Salary then read and display their details on screen.
14. Write a Python Program to Create a binary file with roll number and name. Search for a given roll number and display the name, if not found display appropriate message.
15. Write a Python program Create a CSV file to store Rollno, Name, Age and search any Rollno and display Name, Age and if not found display appropriate message.

16. Write a python program to implement a stack operations push and pop using a list data-structure
17. Write a python program to implement a stack operations push and peek using a list data-structure.
18. Write a python program to display popped item and peek item from a stack using a list data-structure.
19. To write SQL commands for the following on the basis of given table student.
Create table STUDENT , with the following fields

Field	Type
sno	int
Name	varchar(20)
Dept	char(10)
Admission	date
Age	int
Fee	int
Gender	char(20)

- a) Insert the following data to the table STUDENT:

sno	Name	Dept	Admission	Age	Fee	Gender
1	Muhammad	CS	2022-02-22	18	8000	M
2	Raheem	MATH	2021-12-02	21	9000	M
3	Anu	HISTORY	2021-10-12	20	7000	F
4	Raj	ENGLISH	2020-09-09	21	8000	M
5	PETER	ENGLISH	2020-02-19	22	8000	M
6	BANU	MATH	2020-08-11	21	9000	F
7	KHAN	CS	2021-08-21	22	8000	M

- b) Alter the table STUDENT with the new attribute address with the type of Char(10).
- c) Modify the attribute gender with type of Char(7) in the table STUDENT.
- d) Drop the attribute address from the table STUDENT.
- e) Update the student raj's record: change his department as 'HISTORY'.
- f) To display the student's names starting with 'A'.

20. To write SQL commands for the following on the basis of given table student.

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6	BANU	MATH	2020-08-11	21	9000	F
7	KHAN	CS	2021-08-21	22	8000	M

b) Use Order by to display data in ascending / descending order by name

c) Use delete command to remove the last row from the student table.

d) To display the number of students in each dept.

e) Give the Output of following:

- Select COUNT(distinct dept) from student.
- Select MAX(age) from the student where Gender='F'.
- Select MIN(age) from the student where Gender='M'.
- Select AVG(fee) from the student where Admn='11/08/2020'.
- Select SUM(fee) from the student where Admn<'05/09/2020'

21. To write SQL commands for the following on the basis of given relations.

Table: Stationary

P_id	P_name	Company	Price
1001	Pen	Camlin	20
1011	Marker	Camlin	30
1003	Pencil	Doms	5
1004	Eraser	Doms	5

Table : Consumer

C_id	C_name	Address	P_id
10	Anil	Delhi	1001
11	Ali	Chennai	1002
12	Rafeeq	Chennai	1001
13	Raj	Bangalore	1003
14	rahul	Mumbai	1006

- To display the details of those consumers whose Address is Delhi.
- To display the details of Stationary whose Price is in the range of 4 to 22.
- To display the C_name, Address from Table consumer, and Company and price from table stationary, with their corresponding matching P_ID.
- To increase the Price of all stationary by 2.
- Select Distinct Address from Consumer.
- Select company, MAX(price), MIN(price), COUNT(*) from stationary GROUP BY company.
- Select Consumer. C_Name, Stationary. P_Name, Stationary. Price from stationary, Consumer where Consumer.P_ID = Stationary.P_ID

22. Write a python database connectivity program to display the full employee table in python IDLE from MYSQL
23. Write a python database connectivity program to search an employee number in table employee and display record, if empno not found display appropriate message.
24. Write a python database connectivity program to update the employee record of entered employee number.