

Revised Board Practical File for 2020-2021

Class XII

Subject : Computer Science

1. Write a program to calculate the nth term of Fibonacci series using function.
2. Program to search any word in given string/sentence using function.
3. Read a text file line by line and display each word separated by a #.
4. Read a text file and display the number of vowels/ consonants/uppercase/ lowercase characters and digits in the file.
5. Read a text file and display the largest word and maximum number of characters present in a line from text file.
6. Write a program using Dictionary and Text files to store roman numbers and find their equivalent.
7. Write a menu driven program to perform read and write operations using a text file called "student.txt" counting student roll_no, name and address using two separate functions as given below :
 - Student_Record(filename) – Entering student details
While writing to a file (student.txt), the roll_no field will be separated from the renaming fields with a comma operator.
 - Student_ReadData(filename) - Display student details
 - Student_Search(filename) – Search a student on the basis of roll_no
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. Create a binary file with roll number, name and marks. Input a roll number and update the marks.
10. Remove all the lines that contain the character 'a' in a file and write it to another file.
11. Write a random number generator that generates random numbers between 1 and 6 (simulates a dice).
12. Take a sample of ten phishing e-mails (or any text file) and find most commonly occurring word(s)
13. Program to create CSV file and store empno,name,salary and search any empno and display name,salary and if not found appropriate message.
14. Program to implement Stack in Python using List .
15. Program to implement Queue in Python using List.

16. Program to create 21 Stick Game so that computer always wins .
17. Program to connect with database and store record of employee and display records.
18. Program to connect with database and search employee number in table employee and display record, if empno not found display appropriate message.
19. Program to connect with database and update the employee record of entered empno.
20. Program to connect with database and delete the record of entered employee number.

N.B. All the above programs and outputs should be written thorough pen in your practical copy (Use Thread Practical File).

SQL

1. Consider the following tables and write the SQL command for the following statements. write the output of each query also :-

Table1: EMP

Id	Name	Age	Department	Sal	Sex
1	Arprit	62	Sales	38000	M
2	Zarina	22	Accounts	29000	F
3	Kareem	32	Sales	17000	M
4	Arun	42	Manager	80000	M
5	Zubin	30	Accounts	35000	M
6	Kettaki	26	Finance	60000	F
7	Ankita	29	Finance	65000	F
8	Zareen	45	Sales	28000	F
9	Kush	29	Accounts	32000	M
10	Shilpa	23	Sales	22000	F

Example: i. To display the all information of Sales department.

select * from EMP where Department='Sales';

Output :

Id	Name	Age	Department	Sal	Sex
1	Arprit	62	Sales		M
3	Kareem	32	Sales		M
8	Zareen	45	Sales		F
10	Shilpa	23	Sales		F

- i. To display the all information of Sales department.
- ii. To display all information about the employees whose name starts with 'K'.
- iii. To list the name of female employees who are in Finance department.
- iv. To display name and sex of all the employees whose age is in the range of 40 to 50 in ascending order of their name.
- v. To count the number of female employees with age greater than 20 and who are in Accounts department.

Table2 : GAMES

GCode	GameName	Number	PrizeMoney	ScheduleDate
101	Carom Board	2	5000	23-Jan-2021
102	Badminton	2	1200	12-Dec-2020
103	Table Tennis	4	8000	14-Feb-2021
105	Chess	2	9000	02-Jan-2021
108	Lawn Tennis	4	25000	19-Mar-2021

Table3 : PLAYER

PCode	Name	GCode
1	Jiten Singh	101
2	Ravi Dev	108
3	Tiyasha Basu	101
4	Sonam Kapoor	103

- vi. To display the name of all Games with their GCodes.
- vii. To display details of those games which are having PrizeMoney more than 7000.
- viii. To display the content of the GAMES table in ascending order of ScheduleDate.
- ix. To display sum of PrizeMoney for each of the Numberof participation groupings (as shown in column number 2 or 4)
- x. To display the sum of prize money of all games.

Table4 : LOANS

AccNo	Cust_Name	Loan_Amount	Installments	Int_Rate	Start_Rate	Interest
101	R.K.GUPTA	300000	36	12.00	19-07-2019	1200
102	S.P.SHARMA	500000	48	10.00	22-03-2018	1800
103	K.P.JAIN	300000	36	NULL	08-03-2017	1600
104	M.P.YADAV	800000	60	10.00	06-12-2018	2250
105	S.P.SINHA	200000	36	12.50	03-01-2020	4500
106	P.SHARMA	700000	60	12.50	05-06-2018	3500
107	K.S.DHALL	500000	48	NULL	05-03-2018	3800

- xi. Display the sum of all Loan Amount whose Interest rate is greater than 10.
- xii. Display the Maximum Interest from Loans table.
- xiii. Display the count of all loan holders whose name ends with 'SHARMA'.
- xiv. Display the count of all loan holders whose Interest is NULL.

- xv. Display the Interest-wise details of Loan Account Holders.
- xvi. Display the Interest-wise details of Loan Account Holders with at least 10 installments remaining.
- xvii. Display the Interest-wise count of all loan holders whose Installment due is more than 5 in each group.
- xviii. Add one more column name 'Address' to the LOANS table.
- xix. Reduce Interest rate by 1 of all loan holders whose Interest is not NULL.
- xx. Delete the record of customer whose account number is 105.

*** Practical File (Programming from 1 to 13) and twenty SQL queries should be completed before 30th September.