



Anjeev Singh Academy

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Class XII – Computer Science [083]

CBSE Board Examination

Practical File / Report File

Criteria for Report file

[As per CBSE Curriculum]:

- **Minimum 15 Python programs.**
- **SQL Queries – Minimum 5 sets using one table / two tables.**
- **Minimum 4 programs based on Python – SQL connectivity**



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Python Programs

S. No.	Practical's Name	Page No.	Teacher's Sign
1	Write a program to obtain temperature in Celsius and Covert it into Fahrenheit.		
2	Write a program to enter two integers and perform all arithmetic operations on them.		
3	Create Functions in Python to calculate Area and Perimeter of Circle. Write a Python program to ask user to input their choice 1 or 2. If choice is 1 calculate Area of Circle, if choice is 2 calculate Perimeter of Circle otherwise show an error message.		
4	Write a functions in Python to multiply two integer numbers without using the * operator, using repeated addition.		
5	Write program in python to print the given opposite flyod triangle. (opposite right angle triangle)		
6	Create a function to check the given string is palindrome. If Palindrome then return True otherwise return False.		
7	Create a Function to Guess_Numbers(), which ask a number between 1 to 6 form user. Generate a random number between 1 to 6 through random module and check the User Guess is matched or not. Display appropriate message,.		
8	Create functions Wrtie_Text() and Read_Text(). Write_Text() to write the contents in the text file "story.txt" line by line. Read_Text() read the text file "story.txt" and display each word separated by a '@'.		
9	Create a function Count_Characters(filename), which receive filename as argument. Count_Character(filename) function will read text file "story.txt" and display the number of vowels, consonants, uppercase, lowercase, characters in the file.		
10	Create a function Copy_File(target_filename), which receive filename as argument. Copy_File(target_filename) function read a text file "story.txt", copy those lines only to target_filename, which are not started with either 'T' or 'A'.		
11.	Create a binary file "Student.dat" with name, roll number, and marks. Write a function Search(rollnumber) for a given roll number and display the name, if not found display appropriate message.		
12	Create a binary file "Employee.dat" with emp id, name and salary. Write a function Update_Sal(empid), receive an employee id and update the salary.		



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	Write a function Display(filename), display the all updated records.		
13.	Create a CSV file by entering user_id and password, read and search the password for given user_id.		
14.	Crte a CSV file "Score.csv" by entering roll, name and marks. Write a function Grace_5Marks(), which read the csv file and increase the marks by 5 of students which scored less than 33. Write a function Display() to display all records from CSV file.		
15.	Write a Python program to implement a stack using list.		

SQL Queries

S. No.	Practical's Name	Page No.	Teacher's Signature
1	Create a student table (ADMNO, CLASS-SEC, NAME, SCORE) and insert data. Implement the following SQL commands on the student table: <ul style="list-style-type: none">ALTER table to add new attributes (SEX CHAR(1) / modify data type CHAR to VARCHAR/ drop attribute SEXUPDATE table to modify data- Increase the marks of all students by 10 who scored less than 20.ORDER BY to display data in ascending / descending order by (i) NAME wise (ii) SCORE wiseDELETE to remove tuple(s) having SCORE less than 10.GROUP BY and find the min, max, sum, count and average		
2	Create a EMPLOYEE table (EID, NAME, SALARY, DEPT) and insert data. Implement the following SQL commands on the student table: <ul style="list-style-type: none">ALTER table to add new attributes – HRA INT(5) / modify data type of HRA to decimal / drop attribute HRAUPDATE table to modify data – increase the salary by 10%ORDER BY to display data in ascending / descending order (i) SALARY wise (ii) EID wiseDELETE to remove tuple(s) – employee having emp id 101GROUP BY and find the min, max, sum, count and average.		



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3	<ul style="list-style-type: none">❖ Create a Database LIBRARY.❖ Create a table BOOKs (book_id (PK), book_name, author_name, publishers, price, type, qty) and Insert records❖ Create a table ISSUED(issue_id, book_id (FK), quantity_issued) and Insert records.❖ Write the SQL queries –<ul style="list-style-type: none">• To show Book name, Author name and Price of books of First Publ. publishers. [SELECT, WHERE]• To list the names from books of Text type. [SELECT, WHERE]• To display the names and price from books in ascending order. [ORDER BY]• To increase the price of all books of EPB publishers by 50. [UPDATE]• To display the Book_Id, Book_Name. and Quantity_Issued for all books which have been issued. [JOIN QUERY]• To display the list of books having publisher value is NULL.• To display the unique name of all Publishers.• To display the Maximum and Average Price of Books Publisher wise.❖ Write the Output of the following queries based on the above tables.<ul style="list-style-type: none">• SELECT COUNT(*) FROM BOOKS;• SELECT MAX(PRICE) FROM BOOKS WHERE QUANTITY >= 15;• SELECT BOOK_NAME, AUTHOR_NAME FROM BOOKS WHERE PUBLISHERS = "EPB";• SELECT COUNT(DISTINCT PUBLISHERS) FROM BOOKS WHERE PRICE >= 400;		
4	<ul style="list-style-type: none">❖ Create a Database COMPANY.❖ Create a table JOB (JOBID (PK), JOBTITLE, SALARY) and Insert Records.❖ Create a table Employee (EID (PK), NAME, SALES, JOBID (FK)) and Insert Records❖ Write the SQL Queries for the following:<ol style="list-style-type: none">i. To display employee ids, names of employees, job ids, with corresponding job titles. (JOIN QUERY)ii. To display names of employees, sales and corresponding job titles who have achieved sales more than 130000. (JOIN QUERY)iii. To display names and corresponding job titles of those employees who have 'SINGH' (anywhere) in their names.iv. Display the name of employee having maximum salary.v. Write the SQL command to change the JobId to 104 of the Employee with ID as E4 in the table EMPLOYEE.		
5	<ul style="list-style-type: none">❖ Create a Table CLUB (CoachId, CoachName, Age, Sports, DateofApp, Pay, Sex) and Insert Records.❖ Write the SQL Queries for the following: -<ul style="list-style-type: none">• To display the list of coach who is playing KARATE.		



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	<ul style="list-style-type: none">To display the records having Pay between 500 to 1000.To display the names of coach whose name starts with 'A'.To display the total salary paid to Coach Gender wise.To display all records alphabetically on name. <p>❖ Give the output of following SQL statements: -</p> <ul style="list-style-type: none">SELECT COUNT(DISTINCT SPORTS) FROM CLUB;SELECT MIN(AGE) FROM CLUB WHERE SEX = 'M';SELECT AVG(AGE) FROM CLUB GROUP BY SEX;SLEECT SUM(PAY) FROM CLUB WHERE DATEOFAPP > '31-03-1998'		
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Python - SQL Connectivity Programs

S. No.	Practical's Name	Page No.	Teacher's Signature
1	Write a Python Program to create a Database named "School". Display the List of Databases available in MySQL.		
2	Write a Python program to Create a Table name "Student" under database "School" contained RollNo, Name, UT1, and UT2 score. Note: UT1 and UT2 out of 40 only.		
3	Write a Python Program to Insert Records in "Student" table. Display all records. Note: UT1 and UT2 out of 40 only		
4.	Write a Python program to increase the marks of UT1 by 10 of those students having UT1 marks less than 20. Also display a message how many records are updated.		
5.	Write a Python programs to Display Records form table "Student" with their Total Marks and Percentage. (totalmarks = UT1 + UT2) (percentage = totalmarks / 80 * 100		