Aim:

To implement the concept of SQL working with dates, including operations such as retrieving formatting & performing culculations on the date and time values using SQL queries.

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Objective: To understand how to use data & time function in 891.	ms_
To retrieve & manipulate date-related data from database	٩
To perform orithmetic operations with dates	-
To use built-in con so with dates	
To use by 14-in SPL functions for date formatting difference & compension	7
Theory: Dates & times are crucial data types in DRM.  SQL provides various built in functions for hand	S.
and manipulating dute time values. These tunction	Dan
allow formutting extraction, difference calculation	8
& conditional Checks.	
DIMMON SQL I) CURRENT_DATE, CURRENT_TIME, NOW () -> Retreive	
tote functions the urrent I dute / time.	-
	$\dashv$
ii) DATE (), TIME () - Extract date on time from	
datetime.	
iii) DATEDIFF (date1, date2) - Returns the difference	in
dotts	-3.
The state of the s	

in) DATE ADD (date, interval n UNIT) -> Adds interval to the date.  V) DATE CUB (date, INTERVAL n UNIT) -> Subtrarts Interval from dute.  Vi) YEAR () MONTH () DAY () -> Extract year, month or day.  Vii) STR TO DATE () / DATE FORMAT () -> Convert / format date string.  Toget sample reads including various reards.  II) Insert sample reads including various reards.  III) Unit & execute & & queries using different date functions.  IV) Observe & analyze the outputs.  Codes  Experimental  III) What is the SQL query to display the lumber system date ?  III) What is the SQL query to display the properties who joined after January 1, 2020?  III) What an SQL query to calculate the great each employee using their date of birth DOB?	
DATE_SUB (date, INTERVAL IN UNITY) Subtracts  Interval from dute.  VI) YEAR () MONTH () DAY () -> Extract year,  month or day.  VII) STR TO DATE () / DATE FORMAT () -> Convert /  format date string.  Tract a sample table with date & time feilds  II) Insert sample records including various records.  III) White & execute SEL queries using different date functions.  IV) Observe & analyze the nutrits.  Codes  Experimental  I) what is the SQL query to display the lumint system date ?  III) How do you retrieve the records of employees with joined after January 1, 2020?  III) Write an SEL query to calculate the accord	IV) DATE_ADD (date interval of UNITY)
V) DATE SUB (date, INTERVAL O UNIT) Subtracts  Interval from dute.  Vi) YEAR () MONTH () DAY () - Extract year,  month or day.  VII) STR TO DATE () / DATE FORMAT () - Convert /  format date string.  Together a sample table with date & time feilds  II) Insert sample records including various records.  III) White & execute SEL queries using different date functions.  IV) Observe & analyze the outputs.  Codes  Experimental  I) what is the SQL query to display the lumint system date ?  III) Whose do you retrieve the records of employees with joined after January 1, 2020 ?  III) Whose an SEL query to calculate the ass of	to the date.
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viii) STR_TO_DATE () / DATE_FORMAT () - Convert /  Format date string  Freedure:    Trate a Sample table with date & time feilds   iii   Insert Sample records including various records   iiii   white & execute SQL queries using different date functions.   iv   Observe & analyze the numbers.    Codes   Experimental	
Vii) STR_TO_DATE () / DATE_FORMAT () -> Convert /  Format date string  Freedure:    Trate a Sample table with date & time feilds   III   Insert Sample records including various records   III   White & execute SSI queries using different date functions.   IV Observe & analyze the numbers.    Codes   Experimental	month on 1 MONTH () DAY () - Extract year,
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iv) Observe & analyze the outputs.  Codes  Experimental  i) What is the SQL query to display the nument system date?  ii) How do you retrieve the records of employees who joined after January 1, 2020?  iii) Write an SQL query to calculate the accord	111) Write & exemple SOL queries using different date
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iii) write an sor gury to calculate the are of	ii) How do you retrieve the records of emplaces
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Conclusion: The experiment successfully demonstrated how SQL handles date & time values. We practiced retreiving current dates, filtering data based on date conditions & using built in functions for calculation & formatting. These skills are essential in real-world DB systems.

```
= Programia
Online SQL Editor
                                                                                                                    Interactive SQL Course
Input
                                                                                                                       :
                                                                                                                               Run SQL
 .- Table Creation
CREATE TABLE Employees (
    EMPID INTEGER PRIMARY KEY,
    Name TEXT,
    DateOfJoining DATE,
    DateOfBirth DATE
 .. Data Insertion
 INSERT INTO Employees VALUES (1, 'Alice', '2021-06-15', '1995-03-22');
INSERT INTO Employees VALUES (2, 'Bob', '2020-01-10', '1990-07-14');
INSERT INTO Employees VALUES (3, 'Charlie', '2020 et al.')
 INSERT INTO Employees VALUES (3, 'Charlie', '2019-11-05', '1988-12-01');
 .. Query 1: Current Date
SELECT DATE('now') AS Current_Date;
 .. Query 2: Employees joined after 2020
SELECT * FROM Employees
SERE DateOfJoining > '2020-01-01';
 Query 3: Calculate age (approximate, by subtracting years)
       CAST(strftime('%Y', 'now') AS INTEGER) - CAST(strftime('%Y', DateOfBirth) AS INTEGER) AS Age
FROM Employees;
-- Query 4: Days since joining
SELECT Name,
       ROUND(julianday('now') - julianday(DateOfJoining)) AS Days_Since_Joining
FROM Employees;
-- Query 5: Add 1 year to joining date
SELECT Name,
       DATE(DateOfJoining, '+1 year') AS Next_Anniversary
FROM Employees;
                                                                 Available Tables
                Output
   Current_Date
2025-04-19
                                                                                                     DateOfBirth
  EmplD
                                                       DateOfJoining
                            Name
  1
                                                                                                     1995-03-22
                                                       2021-06-15
                            Alice
  2
                                                                                                     1990-07-14
                                                       2020-01-10
                            Bob
  Name
                                                                                  Age
   Alice
                                                                                 30
   Bob
                                                                                  35
   Charlie
                                                                                  37
   Name
                                                 Days_Since_Joining
   Alice
                                                 1405
   Bob
                                                 1927
   Charlie
                                                 1993
   Name
                                                   Next_Anniversary
   Alice
                                                   2022-06-15
   Bob
                                                   2021-01-10
   Charlie
                                                   2020-11-05
```

Formatted\_DoB

Name

(v	How an you find the number of a comployer has been working since their wite a query to add a your to date of each employer?  What he has con query to format to birth as "DD-MM-YVYY"?	issiving date ?
	The experiment was successfully dention sol handles date & Time practiced retaining whent dates, for based on the Canditions & conditions & tormattions for calculations & tormattickles are eccentral in real world of	volues. We alternag date
	CENT PALLOTTI COLLEGE OF ENGINEERING & TECHNOLOGY, NAC	