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| **Experiment No.** | **9** |

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| **AIM:** | **Date & Time Operators** |
| **PROBLEM STATEMENT:** | Implement different types of date-time operators on user data in MySQL |
| **THEORY:** | In SQL, dates are complicated, since while working with database, the format of the date in table must be matched with the input date in order to insert. In various scenarios instead of date, datetime (time is also involved with date) is used.  In MySql the **default date functions** are:  1. **CURDATE():** Returns current date  2. **CURTIME():** Returns current time  3. **NOW():** Returns current date & time  4. **DATE():** Returns date part of the date/time expression  5. **TIME():** Returns time part of the date/time expression  MySql Date **Data-Types:**  1. **DATE** - format YYYY-MM-DD  2. **DATETIME** - format: YYYY-MM-DD HH:MI:SS  3. **TIMESTAMP** - format: YYYY-MM-DD HH:MI:SS  4. **YEAR** - format YYYY or YY |
| **QUERIES:** | **Default Date Functions:**  1. SELECT DATE('2003-01-28 08:20:53');  2. SELECT TIME('2003-01-28 08:20:53');  3. SELECT CURDATE();  4. SELECT CURTIME();  5. SELECT NOW();  **Table date Function Queries:**  1. Add birth date column to patient table with data type ‘date’:  ALTER TABLE patient ADD COLUMN birthdate DATE AFTER Age;  2. UPDATE patient SET birthdate = '2004-03-26' WHERE P\_id=6;  3. Show Formatted birth date of patient with id = 6:  SELECT Pname,DATE\_FORMAT(birthdate,'%W %M %D %Y') AS birthdate FROM patient WHERE P\_id=6;  **Date Addition/Subtraction Functions:**  1. SELECT DATE\_ADD('2003-01-29', INTERVAL 3 DAY) AS newDate;  2. SELECT DATE\_SUB('2004-03-03', INTERVAL 4 DAY) AS newDate; |
| **CONCLUSION:** | In this experiment, we learned to use different types of date time operators and functions in mysql to retrieve specific date/time information from tables. |