DBMS LAB 1 106122006

1. Find year from date

```
SELECT YEAR('2024/07/16');
```

2024

2. Check whether date passed to query is of given format or not

```
SELECT DATE('07/07/2024');
```

NULL

3. Find the size of the SCHEMA/USER.

4. Display the current time

```
SELECT CURTIME();
```

15:08:25

5. Given a date retrieve next day's date

```
select date_add('2003/12/11', interval 1 day);
```

2003-12-12

6. Get database date

```
SELECT CURDATE();
```

2024-07-25

7. Returns the default(current) database name.

```
select database();
```

NULL

8 Retrieve the current MySQL user name and host name.

```
SELECT USER() AS 'Current User' , @@hostname AS 'Host Name';
+----------------+-----------------------+
| Current User   | Host Name             |
+----------------+-----------------------+
| root@localhost | nitt-OptiPlex-7470-AIO |
+----------------+-----------------------+
```

9. Find the string that tells the MySQL server version.

```
SELECT VERSION();
 8.0.36-0ubuntu0.20.04.1
```

10. Perform Bitwise OR, Bitwise XOR and Bitwise AND

```
select 3&4, 3|4, 3^4;
+-----+-----+-----+
| 3&4 | 3|4 | 3^4 |
+-----+-----+-----+
|   0 |   7 |   7 |
+-----+-----+-----+
```

11. Find the difference between two dates and print in terms of the number of days.

```
select datediff('2003/12/12','2003/12/05');
+-----------------------------------+
| datediff('2003/12/12','2003/12/05') |
+-----------------------------------+
|                                 7 |
+-----------------------------------+
```

12. Add one day to the current date.

```
SELECT DATE_ADD(CURDATE(), INTERVAL 1 DAY) AS NextDay;
+------------+
| NextDay    |
+------------+
| 2024-07-26 |
+------------+
```

13. Add two hours and 5000 minutes to the current date and print the new date.

```
SELECT ADDTIME(NOW(), "2:50");
+----------------------+
| ADDTIME(NOW(), "2:50") |
+----------------------+
| 2024-07-25 18:15:38    |
+----------------------+
```

14. Find the floor and ceil values of a floating point number. Also operate on the power, log, modulus, round off and truncate functions.

```
 select floor(5.3), ceil(5.3);
+------------+-----------+
| floor(5.3) | ceil(5.3) |
+------------+-----------+
|          5 |         6 |
+------------+-----------+
SELECT POWER(2, 3), LOG10(100);
+-------------+------------+
| POWER(2, 3) | LOG10(100) |
+-------------+------------+
|           8 |          2 |
+-------------+------------+
SELECT MOD(10, 3), ROUND(3.14159, 2), TRUNCATE(3.14159, 2);
+------------+------------------+---------------------+
| MOD(10, 3) | ROUND(3.14159, 2) | TRUNCATE(3.14159, 2) |
+------------+------------------+---------------------+
|          1 |             3.14 |                3.14 |
+------------+------------------+---------------------+
```

15. In the first name of the employee, match the following using regular expressions.

```
SELECT  CASE
```

```
        WHEN 'Alice' REGEXP '^a' THEN 'Name starts with a'
        ELSE 'Name does not start with a'
        END AS result;
+--------------------+
| result             |
+--------------------+
| Name starts with a |
+--------------------+
```

16. Compare two strings and print the value ‘yes’ if they are equal, else print ‘no’.

```
SELECT CASE WHEN 'apple' = 'banana' THEN 'yes' ELSE 'no' END AS
result;
+--------+
| result |
+--------+
| no     |
+--------+
```

17. Simulate the “IF... ELSE” construct in MySQL for a mark and grade setup.

```
 -> SELECT
->    85 AS marks,
->    CASE
->        WHEN 85 >= 90 AND 85 <= 100 THEN 'A'
->        WHEN 85 >= 80 AND 85 < 90 THEN 'B'
->        WHEN 85 >= 70 AND 85 < 80 THEN 'C'
->        WHEN 85 >= 60 AND 85 < 70 THEN 'D'
```

```
->       WHEN 85 >= 0 AND 85 < 60 THEN 'F'
->       ELSE 'Invalid marks'
->    END AS grade;
+-------+-------+
| marks | grade |
+-------+-------+
|    85 | B     |
+-------+-------+
```

18. Use IFNULL to check whether a mathematical expression gives a NULL value or not.

```
SELECT IFNULL(10 / 5, 'Result is NULL') AS result;
+--------+
| result |
+--------+
| 2.0000 |
+--------+
```