### LAB SESSION 1 18/07/2024

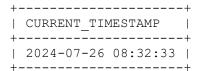
16/07/2024
1.Installation of MYSQL
sudo apt install mysql-server
2. SQL query to find year from the given date
select year("2024-12-10") as y;
++   y
3. Check whether the date passed to the query is the date of given format
select str_to_date('2024-07-18','%y-%m-%d') as valid_date;
++
valid_date
+
NULL
++
3. Given a date, retrieve next date
SELECT DATE_ADD("2024-07-18", INTERVAL 1 DAY);
++
DATE_ADD("2024-07-18", INTERVAL 1 DAY)
++
2024-07-19
++
4. Patriova upornamo and pageword

4. Retrieve username and password

select user, authentication\_string from mysql.user;

<ol><li>Get database date</li></ol>
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SELECT CURRENT\_TIMESTAMP;



6. Default database name

use mysql;

Database changed

7. MySQL username and hostname

select user, host, authentication\_string, plugin from mysql.user;



8. MySQL server version

SELECT VERSION();

+----+

| VERSION() |

+----+

| 9.0.1 |

+----+

9. Bitwise XOR, AND, OR

SELECT 1&2 AS and Res, 1|2 AS or Res, 1^2 AS xor Res;

```
+-----+
| andRes | orRes | xorRes |
+-----+
| 0 | 3 | 3 |
+-----+
```

## 10. Difference between two dates

SELECT DATEDIFF("2017-06-25", "2017-06-15");

+-		+	-
	DATEDIFF("2017-06-25",	"2017-06-15")	
+-		+	-
		10	
+.			_

## 11. Add 2:50 to the current time

SELECT ADDTIME("12:00:00", "02:50:00") as updated;

```
+----+
| updated |
+----+
| 14:50:00 |
```

#### 12. Floor, Ceil of a float

select floor(9.8) as f, ceil(9.8) s c;

```
+---+---+
| f | c |
+---+---+
| 9 | 10 |
+---+---+
```

# 13. Operations on regex

select "Pranav" REGEXP "A\*"; select "Pranav" REGEXP "B+";

+   "Pranav" 	REGEXP	"A*"	+
   +		1	
"Pranav"	REGEXP	"B+"	
 		0	

# 14. Compare 2 strings

Select STRCMP('Sharma', 'Sharma') As 'Cmp\_Value';

```
+----+
| Cmp_Value |
+----+
| 0 |
```

15	Simulate	if-else	statement for	marks and	grades

SELECT IF(500>100, "YES", "NO");

```
+-----+
| IF(500>100, "YES", "NO") |
+------+
| YES |
```

## 16. IS NULL

select isnull(null);

```
+----+
| isnull(null) |
+----+
| 1 |
```

### 17. Grant all privileges to user

GRANT SELECT ON Users TO 'Amit'@'localhost';

ERROR 1410 (42000): You are not allowed to create a user with GRANT

18. Display all Databases

show databases;

#### 19. Size of the schema in MB

SELECT SUM(ROUND(((DATA\_LENGTH + INDEX\_LENGTH) / 1024 / 1024), 2)) AS "SIZE IN MB" FROM INFORMATION\_SCHEMA.TABLES WHERE TABLE\_SCHEMA = "sys";

```
+----+
| SIZE IN MB |
+----+
| 0.02 |
```