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- 1. Write SQL queries in MySQL for the following.
- a. Write an SQL Query to find the year from date.

Ans.

```
SELECT YEAR("2024-07-24") as year;
+-----+
| year |
+-----+
| 2024 |
+-----+
```

b. Check whether date passed to Query is the date of a given format or not. **Ans.**

c. Find the size of the SCHEMA/USER.

Ans.

SELECT table_schema AS "Database", ROUND(SUM(data_length + index_length) / 1024 / 1024, 2) AS "Size (MB)" FROM information_schema.TABLES GROUP BY table schema;

+	+	·	+
mysql		2.64	
information_schema			0.00
sys		0.02	
Exam			0.09
endsem			0.09
performance	e_sche	ma	0.00
D2		0.02	
EMPLOYEE	Ē		0.02
vishnu		0.02	
ADI		0.14	
DTP		0.05	
ACC		0.03	
DB		0.05	
lab4		0.03	
dtbs		0.31	
mydb			0.05
dtb		0.05	
lab6_dbms			0.03
dtbe		0.09	
LAB1			0.13
++			
20 rows in set (0.01 sec)			

d. Display the current time.

Ans.

e. Given a date, retrieve the next day's date.

Ans.

```
SELECT DATE_ADD(CURDATE(), INTERVAL 1 DAY) as tmrw; +-----+
| tmrw |
```

```
+----+
| 2024-07-26 |
+-----+
```

f. Get database's date.

```
Ans.
```

```
SELECT CURRENT_TIMESTAMP();
+-----+
| CURRENT_TIMESTAMP() |
+-----+
| 2024-07-26 01:02:45 |
+------+
```

g. Returns the default(current) database name. Ans.

```
mysql> SELECT CURRENT_USER();
+-----+
| CURRENT_USER() |
+-----+
| root@localhost |
+------+
```

h. Retrieve the current MySQL user name and host name.

Ans.

```
mysql> SELECT CURRENT_USER();
+-----+
| CURRENT_USER() |
+-----+
| root@localhost |
+------+
```

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

Ans.

j. Perform Bitwise OR, Bitwise XOR and Bitwise AND.

Ans

```
SELECT (11 | 7) as bitwiseOR, (11^7) as bitwiseXOR, (11 & 7) as bitwiseand;
+-----+
| bitwiseOR | bitwiseXOR | bitwiseand |
+----+
| 15 | 12 | 3 |
```

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

Ans.

SELECT DATEDIFF("2012-2-20", "2012-1-1") AS diff;

+----+ | diff | +----+ | 50 | +----+

I. Add one day to the current date.

+----+

Ans.

m. Add two hours and 5000 minutes to the current date and print the new date. **Ans.**

```
SELECT DATE_ADD(NOW(), INTERVAL 170 MINUTE);
+-----+
| DATE_ADD(NOW(), INTERVAL 170 MINUTE) |
+-----+
```

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

SELECT FLOOR(10.4) as floorval, ceil(10.4) as ceilval, POW(2,4) as powerval, LN(24) as log, 10%3 as modulo, TRUNCATE(10.1354, 2);

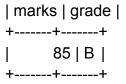
- o. In the first name of the employee, match the following using regular expressions. **Ans.**
- p. Compare two strings and print the value 'yes' if they are equal, else print 'no'. **Ans.**

q. Simulate the "IF... ELSE" construct in MySQL for a mark and grade setup. **Ans.**

SELECT

- -> 85 AS marks,
- -> CASE
- -> WHEN 85 >= 90 THEN 'A'
- -> WHEN 85 >= 80 THEN 'B'
- -> WHEN 85 >= 70 THEN 'C'
- -> WHEN 85 >= 60 THEN 'D'
- -> ELSE 'F'
- -> END AS grade;

+----+



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

Ans.

