DBMS LAB-SESSION-1 (ANSWER SCRIPT)

1) Write the SQL Queries in following Line ?

a) Write SQL Query to find the year from date ?

Ans: SELECT YEAR(curdate());

```
+------------------+
| YEAR(curdate()) |
+------------------+
|             2024 |
+------------------+
```

b) check whether date passed to query is the date of a given format or not ?

Ans: SELECT str_to_date('19/10/2024','%d/%m/%Y') IS NOT NULL;

```
+-------------------------------------------------+
| str_to_date('19/10/2024','%d/%m/%Y') IS NOT NULL |
+-------------------------------------------------+
|                                               1 |
+-------------------------------------------------+
```

c) Find the size of the SCHEMA/USER.

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

```
+---------------------+-----------+
| Database            | Size (MB) |
+---------------------+-----------+
| mysql               |      2.63 |
| information_schema  |      0.00 |
| performance_schema  |      0.00 |
| sys                 |      0.02 |
| kishore             |      0.02 |
+---------------------+-----------+
```

d) Display the current time ?

Ans: SELECT curtime();

```
+-----------+
| curtime() |
+-----------+
| 13:59:50  |
+-----------+
```

e) Given a date,retrieve the next day's date ?

Ans: SELECT DATE_ADD('2024/12/11',INTERVAL 1 DAY);

```
+-----------------------------------+
| DATE_ADD('2024/12/11',INTERVAL 1 DAY) |
+-----------------------------------+
| 2024-12-12                        |
+-----------------------------------+
```

f) Get database's date ?

Ans: SELECT curdate();

```
+------------+
| curdate()  |
+------------+
| 2024-07-26 |
+------------+
```

g) Returns the default(current) database name ?

Ans: SELECT database();

```
+-----------------+
| database()      |
+-----------------+
| kishore_database |
+-----------------+
```

h) Retrieve the current MySQL user name and host name ?

Ans: SELECT user();

```
+----------------+
| user()         |
+----------------+
| root@localhost |
+----------------+
```

i) Find the string that tells the MYSQL server version ?

Ans: SELECT version();

```
+----------------------+
| version()            |
+----------------------+
| 8.0.37-0ubuntu0.24.04.1 |
+----------------------+
```

j) Perform Bitwise OR,Bitwise XOR and Bitwise AND ?

Ans: SELECT 1&9 , 8^10 , 3|2;

```
+------+-------+------+
| 1&9  | 8^10  | 3|2  |
+------+-------+------+
|    1 |     2 |    3 |
+------+-------+------+
```

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

Ans: SELECT DATEDIFF('2020-02-19','2020-02-10');

```
+-----------------------------------+
| DATEDIFF('2020-02-19','2020-02-10') |
+-----------------------------------+
|                                 9 |
+-----------------------------------+
```

l) Add one day to the current date ?

Ans: SELECT DATE_ADD('2024/05/10',INTERVAL 1 DAY);

```
+------------------------------------+
| DATE_ADD('2024/05/10',INTERVAL 1 DAY) |
+------------------------------------+
| 2024-05-11                         |
+------------------------------------+
```

m) Add two hours and 5000 minutes to the current date and print the new date ?

Ans: SELECT addtime(time(now()),'0:02:15');

```
+--------------------------------+
| addtime(time(now()),'0:02:15') |
+--------------------------------+
| 14:04:32                       |
+--------------------------------+
```

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(9.8),ceil(3.3),pow(2,9),round(9.4),log(5),mod(5,2);

```
+-----------+-----------+----------+------------+--------------------+----------+
| floor(9.8) | ceil(3.3) | pow(2,9) | round(9.4) | log(5)             | mod(5,2) |
+-----------+-----------+----------+------------+--------------------+----------+
|         9 |         4 |      512 |          9 | 1.6094379124341003 |        1 |
+-----------+-----------+----------+------------+--------------------+----------+
1 row in set (0.00 sec)
```

o) Compare two strings and print the value 'Yes' if they are equal, else print 'No' ?

Ans: SELECT if(('str'='str'),'Yes','No');

```
+--------------------------------+
| if(('str'='str'),'Yes','No')   |
+--------------------------------+
| Yes                            |
+--------------------------------+
```

p) Simulate the "IF..ELSE" construct in MySQL for a mark and grade setup ?

Ans: SELECT if(85>=90,'S grade',if(85>=75,'A grade',if(85>=65,'B grade',if(85>=55,'C grade',if(85>=40,'D grade',if(85>=30,'Fail','No result')))))) as grade;

```
+-----------+
| grade     |
+-----------+
| A grade   |
+-----------+
```

q) Use IFNULL to check whether a mathematical expressions gives a NULL value or not ?

Ans: SELECT IFNULL(1/0,10);

```
+-----------------+
| IFNULL(1/0,10)  |
+-----------------+
|         10.0000 |
+-----------------+
```