

Lab-1(18/07/24) - Keyword based queries in MySQL

1.

a.) Write a mysql query to find year from date

Ans : `SELECT YEAR(CURRENT_DATE);`

```
mysql> SELECT YEAR(CURRENT_DATE);
+-----+
| YEAR(CURRENT_DATE) |
+-----+
|                2024 |
+-----+
1 row in set (0.00 sec)
```

b) Check whether the date passed to the query is in the given format or not

Ans : `SELECT STR_TO_DATE('25/07/2024','%d/%m/%Y') IS NOT NULL;`

```
mysql> SELECT STR_TO_DATE('26/07/2024','%d/%m/%Y') IS NOT NULL;
+-----+
| STR_TO_DATE('26/07/2024','%d/%m/%Y') IS NOT NULL |
+-----+
|                                                    1 |
+-----+
1 row in set (0.01 sec)
```

c) Find the size of schema or 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> 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;
```

Database	Size (MB)
food_ordering_system	0.17
gregs_list	0.02
information_schema	0.00
mysql	2.72
newtest	0.06
performance_schema	0.00
pragyan_cms_db	1.31
sys	0.02

```
8 rows in set (0.08 sec)
```

d)display the current time

Ans : select current_time;

```
mysql> select current_time;
```

current_time
18:26:21

```
1 row in set (0.00 sec)
```

e)given a date retrieve the next days date

Ans : select date_add(current_date,interval 1 day);

```
mysql> select date_add(current_date,interval 1 day);
```

date_add(current_date,interval 1 day)
2024-07-27

```
1 row in set (0.00 sec)
```

f) get database's date

Ans : select Curdate();

```
mysql> select Curdate();
+-----+
| Curdate() |
+-----+
| 2024-07-26 |
+-----+
1 row in set (0.00 sec)
```

g) return the default(current) database name

Ans : select database();

```
mysql> select database();
+-----+
| database() |
+-----+
| NULL      |
+-----+
1 row in set (0.00 sec)
```

h) retrieve the current mysql username and hostname

Ans: select user();

```
mysql> select user();
+-----+
| user()      |
+-----+
| root@localhost |
+-----+
1 row in set (0.00 sec)
```

i) find the string that tells mysql server version

Ans: select version();

```
mysql> select version();
+-----+
| version()      |
+-----+
| 8.0.37-0ubuntu0.22.04.3 |
+-----+
1 row in set (0.00 sec)
```

j) perform bitwise or xor and and

Ans : select (8|4);

Select (8&4);

Select (8^4);

```
mysql> select (8|4);
+-----+
| (8|4) |
+-----+
|      12 |
+-----+
1 row in set (0.00 sec)
```

```
mysql> select (8&4);
+-----+
| (8&4) |
+-----+
|       0 |
+-----+
1 row in set (0.00 sec)
```

```
mysql> select (8^4);
+-----+
| (8^4) |
+-----+
|      12 |
+-----+
1 row in set (0.00 sec)
```

k) difference between 2 dates and print the difference in number of dates;

mysql> select datediff(current_date,'2024-07-29');

```
mysql> select datediff(current_date,'2024-07-29');
+-----+
| datediff(current_date,'2024-07-29') |
+-----+
|                                     -3 |
+-----+
1 row in set (0.00 sec)
```

l) add one day to current date

Ans : mysql> select date_add(current_date,interval 1 day);

```
mysql> select date_add(current_date,interval 1 day);
+-----+
| date_add(current_date,interval 1 day) |
+-----+
| 2024-07-27                             |
+-----+
1 row in set (0.01 sec)
```

m) add 2 hours and 50 mins to the current date

Ans : mysql> select date_add(current_date,interval 1 day);

```
mysql> select addtime(current_time,'02:50:00');
+-----+
| addtime(current_time,'02:50:00') |
+-----+
| 21:36:05                          |
+-----+
```

n) perform the following operations

Ans : mysql> select

floor(4.5),ceil(4.5),pow(3,4),log(1000),mod(10,4),round(99.9995,3),truncate(99.9995,3);

```
mysql> select floor(4.5),ceil(4.5),pow(3,4),log(1000),mod(10,4),round(99.9995,3),truncate(99.9995,3);
+-----+-----+-----+-----+-----+-----+-----+
| floor(4.5) | ceil(4.5) | pow(3,4) | log(1000) | mod(10,4) | round(99.9995,3) | truncate(99.9995,3) |
+-----+-----+-----+-----+-----+-----+-----+
| 4          | 5          | 81       | 6.907755278982137 | 2          | 100.000          | 99.999          |
+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

o) compare two strings and print yes if same or no if not same

Ans : select strcmp(string1,string2);

```
mysql> select strcmp("kishore","Kishore");
+-----+
| strcmp("kishore","Kishore") |
+-----+
| 0 |
+-----+
1 row in set (0.00 sec)

mysql> select strcmp("kishore","Kisho4e");
+-----+
| strcmp("kishore","Kisho4e") |
+-----+
| 1 |
+-----+
1 row in set (0.00 sec)
```

p)simulate the if else construct for the mark and grade system

Ans : mysql> select if(90>=95,'s grade',if(90>=90,'a grade',if(90>=85,'b grade','e grade')))) as grade;

```
mysql> select if(90>=95,'s grade',if(90>=90,'a grade',if(90>=85,'b grade','e grade')))) as grade;
+-----+
| grade |
+-----+
| a grade |
+-----+
1 row in set (0.00 sec)
```

q)simulate ifnull statement

Ans : mysql> select ifnull(37/0,7);

```
mysql> select ifnull(37/0,7);
+-----+
| ifnull(37/0,7) |
+-----+
| 7.0000 |
+-----+
1 row in set, 1 warning (0.00 sec)
```