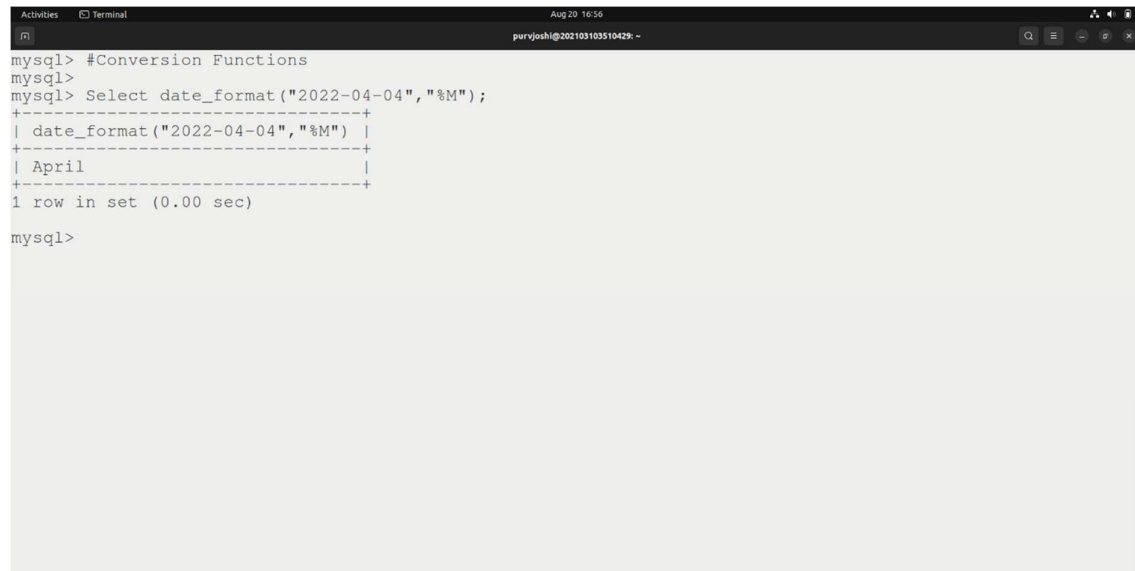


Practical-5

Aim: Queries using Conversion functions, string functions, date functions, time functions, numeric functions.

1. Conversion Functions : Date_Format()

Query: Select date_format ("2022-04-04", "%M");



```


mysql> #Conversion Functions
mysql>
mysql> Select date_format ("2022-04-04", "%M");
+-----+
| date_format ("2022-04-04", "%M") |
+-----+
| April                             |
+-----+
1 row in set (0.00 sec)

mysql>
  
```

2. String Functions : Concat(), lpad(), rpad(), ltrim(), rtrim(), lower(), upper(), initcap(), length(), substr() and instr()

Query: (SELECT CONCAT('Purv', 'Joshi'));

(SELECT LPAD ("Purv Joshi", 20, "Hello");) (SELECT RPAD ("Purv Joshi", 20, "Hello");)



```

mysql>
mysql> #string functions
mysql>
mysql> SELECT CONCAT('Purv', 'Joshi');
+-----+
| CONCAT('Purv', 'Joshi') |
+-----+
| PurvJoshi               |
+-----+
1 row in set (0.01 sec)

mysql> SELECT LPAD("Purv Joshi", 20, "Hello");
+-----+
| LPAD("Purv Joshi", 20, "Hello") |
+-----+
| HelloHelloPurv Joshi           |
+-----+
1 row in set (0.00 sec)

mysql> SELECT RPAD("Purv Joshi", 20, "Hello");
+-----+
| RPAD("Purv Joshi", 20, "Hello") |
+-----+
| Purv JoshiHelloHello           |
+-----+
1 row in set (0.00 sec)
  
```

Query: (select ltrim("Purv Joshi");),
(select rtrim("Purv Joshi ");),
(select lower ("PURV JOSHI");)

```

mysql> select ltrim("Purv Joshi");
+-----+
| ltrim("Purv Joshi") |
+-----+
| Purv Joshi          |
+-----+
1 row in set (0.00 sec)

mysql> select rtrim("Purv Joshi ");
+-----+
| rtrim("Purv Joshi ") |
+-----+
| Purv Joshi           |
+-----+
1 row in set (0.01 sec)

mysql> select lower("PURV JOSHI");
+-----+
| lower("PURV JOSHI") |
+-----+
| purv joshi          |
+-----+
1 row in set (0.01 sec)

```

Query: (select upper ("purv joshi");),
(select length ("welcome, Purv Joshi");),
(select substr("Purv Joshi",3,4);)

```

mysql> select upper("purv joshi");
+-----+
| upper("purv joshi") |
+-----+
| PURV JOSHI          |
+-----+
1 row in set (0.00 sec)

mysql> select length("welcome,Purv Joshi");
+-----+
| length("welcome,Purv Joshi") |
+-----+
| 18                             |
+-----+
1 row in set (0.00 sec)

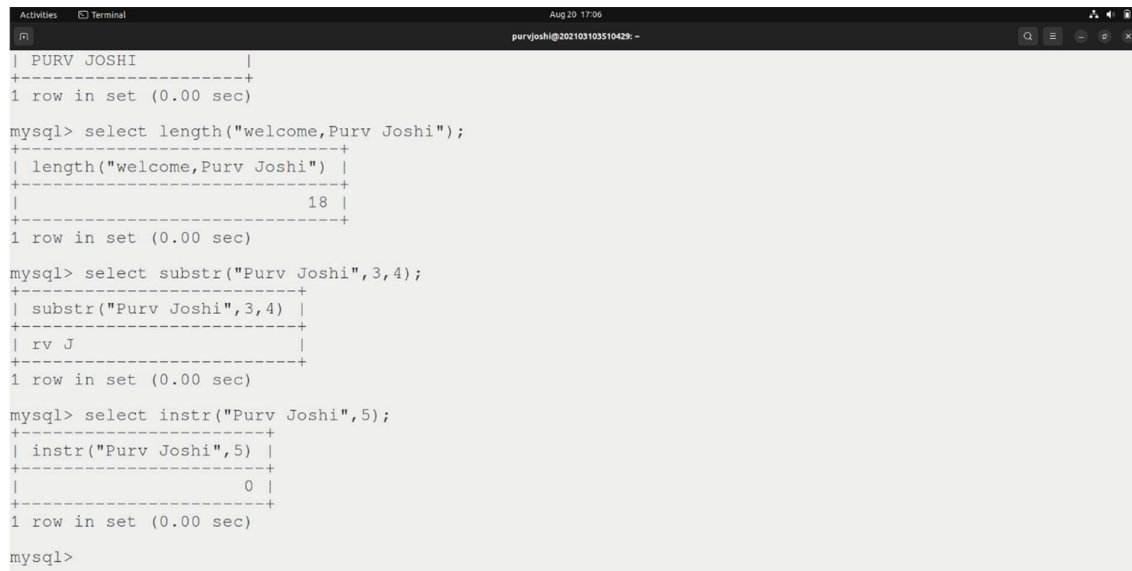
mysql> select substr("Purv Joshi",3,4);
+-----+
| substr("Purv Joshi",3,4) |
+-----+
| rv J                      |
+-----+
1 row in set (0.00 sec)

```

Query: select length ("welcome, Purv Joshi");

```
select substr("Purv Joshi",3,4);
```

```
select instr("Purv Joshi",5);
```



```

Activities Terminal Aug 20 17:06
purvjoshi@202103103510429: ~
| PURV JOSHI |
+-----+
1 row in set (0.00 sec)

mysql> select length("welcome,Purv Joshi");
+-----+
| length("welcome,Purv Joshi") |
+-----+
| 18 |
+-----+
1 row in set (0.00 sec)

mysql> select substr("Purv Joshi",3,4);
+-----+
| substr("Purv Joshi",3,4) |
+-----+
| rv J |
+-----+
1 row in set (0.00 sec)

mysql> select instr("Purv Joshi",5);
+-----+
| instr("Purv Joshi",5) |
+-----+
| 0 |
+-----+
1 row in set (0.00 sec)

mysql>

```

3. Date Functions : add_date(), curdate(), datediff(), extract(), current_timestamp(), dayname()

Query: SELECT EXTRACT (YEAR FROM CURDATE());

```
SELECT CURRENT_TIMESTAMP();
```

```
SELECT DAYNAME (1998-11-21');
```



```

Activities Terminal Aug 21 14:25
purvjoshi@202103103510429: ~
mysql> SELECT EXTRACT (YEAR FROM CURDATE());
+-----+
| EXTRACT (YEAR FROM CURDATE()) |
+-----+
| 2022 |
+-----+
1 row in set (0.00 sec)

mysql> SELECT CURRENT_TIMESTAMP();
+-----+
| CURRENT_TIMESTAMP() |
+-----+
| 2022-08-21 14:24:53 |
+-----+
1 row in set (0.00 sec)

mysql> SELECT DAYNAME ('1998-11-21');
+-----+
| DAYNAME ('1998-11-21') |
+-----+
| Saturday |
+-----+
1 row in set (0.00 sec)

mysql>

```

Query: SELECT ADDBDATE (2015-09-05', INTERVAL 20 DAY);

select curdate(); SELECT LAST DAY ('2019-05-25');
SELECT DATEDIFF (2015-09-05', '1989-03-25');

```

mysql> #Date Functions
mysql>
mysql> SELECT ADDDATE('2015-09-05', INTERVAL 20 DAY);
+-----+
| ADDDATE('2015-09-05', INTERVAL 20 DAY) |
+-----+
| 2015-09-25                             |
+-----+
1 row in set (0.00 sec)

mysql> select curdate();
+-----+
| curdate() |
+-----+
| 2022-08-21 |
+-----+
1 row in set (0.00 sec)

mysql> SELECT LAST_DAY('2019-05-25');
+-----+
| LAST_DAY('2019-05-25') |
+-----+
| 2019-05-31             |
+-----+
1 row in set (0.00 sec)

mysql> SELECT DATEDIFF('2015-09-05', '1989-03-25');
+-----+
| DATEDIFF('2015-09-05', '1989-03-25') |
+-----+
| 9660                                |
+-----+

```

- 4. Time Functions : time_format(), timediff(), to_days(), time_to_sec(), timestamp(), sec_to_time(), localtime(), str_to_date(), utc_time(), minute()**

Query: SELECT TIME TO SEC ('05:15:40');

SELECT UTC TIME, UTC_TIME();

SELECT MINUTE ('2009-05-18 10:15:21.000423');

Query: SELECT TIMESTAMP ('2022-08-15');

```

mysql> SELECT TIME_TO_SEC('05:15:40');
+-----+
| TIME_TO_SEC('05:15:40') |
+-----+
| 18940                    |
+-----+
1 row in set (0.00 sec)

mysql> SELECT UTC_TIME,UTC_TIME();
+-----+
| UTC_TIME | UTC_TIME() |
+-----+
| 12:56:12 | 12:56:12  |
+-----+
1 row in set (0.00 sec)

mysql> SELECT MINUTE('2009-05-18 10:15:21.000423');
+-----+
| MINUTE('2009-05-18 10:15:21.000423') |
+-----+
| 15                                     |
+-----+
1 row in set (0.00 sec)

mysql>

```

SELECT SEC_TO_TIME (3650);

SELECT LOCALTIME;

SELECT STR_TO_DATE (104, 04, 2004', '%d, %m, &Y');

```

mysql> SELECT TIMESTAMP ('2022-08-15');
+-----+
| TIMESTAMP ('2022-08-15') |
+-----+
| 2022-08-15 00:00:00      |
+-----+
1 row in set (0.00 sec)

mysql> SELECT SEC_TO_TIME(3650);
+-----+
| SEC_TO_TIME(3650) |
+-----+
| 01:00:50          |
+-----+
1 row in set (0.00 sec)

mysql> SELECT LOCALTIME;
+-----+
| LOCALTIME |
+-----+
| 2022-08-21 18:22:35 |
+-----+
1 row in set (0.00 sec)

mysql> SELECT STR_TO_DATE ('04, 04, 2004', '%d, %m, %Y');
+-----+
| STR_TO_DATE ('04, 04, 2004', '%d, %m, %Y') |
+-----+
| 2004-04-04 |
+-----+
1 row in set (0.00 sec)

mysql>

```

Query: SELECT TIME_FORMAT('47:15:40', '%H %k %sh %I %l');

SELECT TIMEDIFF ('2009-05-18 10:45:57, 2009-05-18 3:40:50');

SELECT TO_DAYS ('2009-05-18');

SELECT TIME TO SEC ('15:15:40');

```

mysql> #Time Functions
mysql>
mysql> SELECT TIME_FORMAT('47:15:40', '%H %k %sh %I %l');
+-----+
| TIME_FORMAT('47:15:40', '%H %k %sh %I %l') |
+-----+
| 47 47 11 11 11 |
+-----+
1 row in set (0.00 sec)

mysql> SELECT TIMEDIFF('2009-05-18 10:45:57', '2009-05-18 3:40:50');
+-----+
| TIMEDIFF('2009-05-18 10:45:57', '2009-05-18 3:40:50') |
+-----+
| 07:05:07 |
+-----+
1 row in set (0.00 sec)

mysql> SELECT TO_DAYS('2009-05-18');
+-----+
| TO_DAYS('2009-05-18') |
+-----+
| 733910 |
+-----+
1 row in set (0.00 sec)

mysql> SELECT TIME_TO_SEC('15:15:40');
+-----+
| TIME_TO_SEC('15:15:40') |
+-----+
| 54940 |
+-----+
1 row in set (0.00 sec)

```

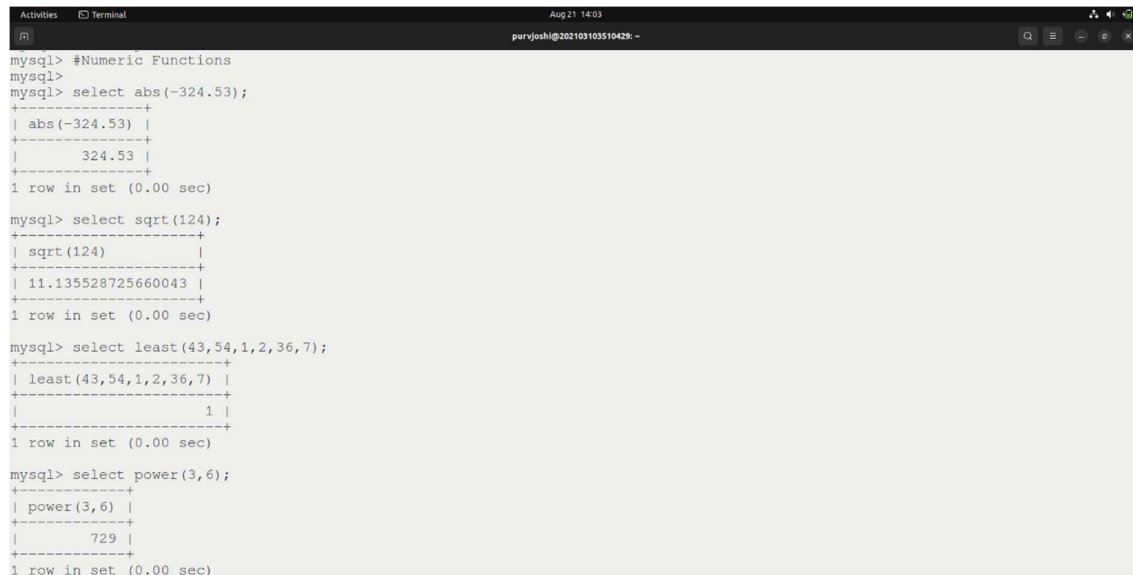
5. Numeric Functions : abs(), sqrt(), least(), power(), greatest(), round(), mod()

Query: select abs (-324.53);

select sqrt(124);

select least (43,54,1,2,36,7);

select power (3,6);



```
Activities Terminal
Aug 21 14:03
parvjoah@202103103510429: ~
mysql> #Numeric Functions
mysql>
mysql> select abs(-324.53);
+-----+
| abs(-324.53) |
+-----+
|          324.53 |
+-----+
1 row in set (0.00 sec)

mysql> select sqrt(124);
+-----+
| sqrt(124) |
+-----+
| 11.135528725660043 |
+-----+
1 row in set (0.00 sec)

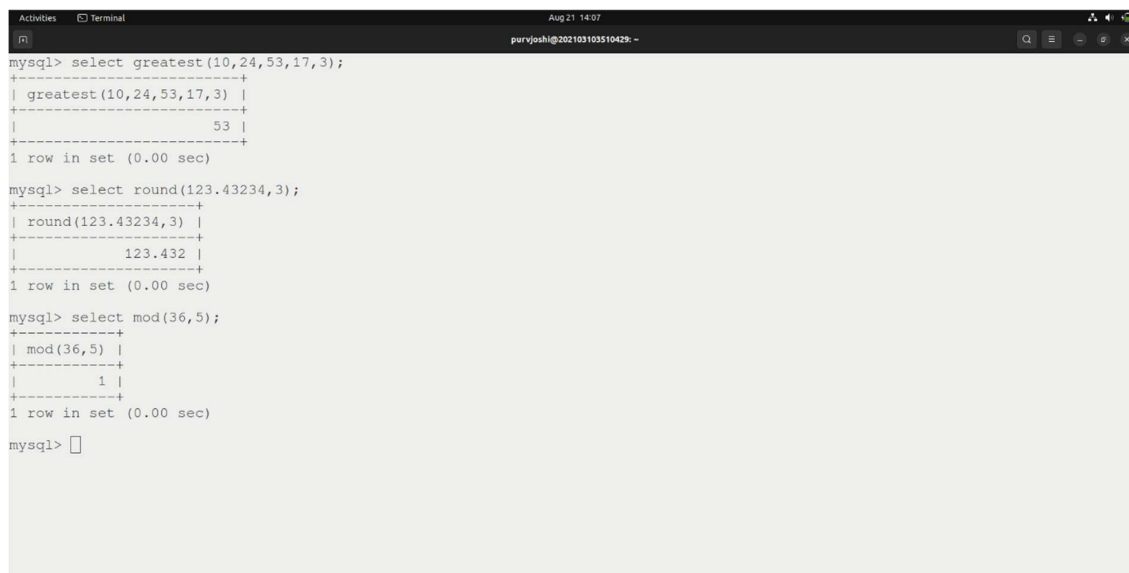
mysql> select least(43,54,1,2,36,7);
+-----+
| least(43,54,1,2,36,7) |
+-----+
|          1 |
+-----+
1 row in set (0.00 sec)

mysql> select power(3,6);
+-----+
| power(3,6) |
+-----+
|          729 |
+-----+
1 row in set (0.00 sec)
```

Query: select greatest (10, 24, 53, 17,3);

select round (123.43234,3);

select mod (36,5);



```
Activities Terminal
Aug 21 14:07
parvjoah@202103103510429: ~
mysql> select greatest(10,24,53,17,3);
+-----+
| greatest(10,24,53,17,3) |
+-----+
|          53 |
+-----+
1 row in set (0.00 sec)

mysql> select round(123.43234,3);
+-----+
| round(123.43234,3) |
+-----+
|          123.432 |
+-----+
1 row in set (0.00 sec)

mysql> select mod(36,5);
+-----+
| mod(36,5) |
+-----+
|          1 |
+-----+
1 row in set (0.00 sec)

mysql>
```

CONCLUSION: In this practical we have performed queries using Conversion functions, string functions, date functions, time functions, numeric functions. This function can be useful to perform simple queries in mysql.