## **SQL / ORACLE BUILT-IN FUNCTIONS**

MariaDB [(none)]> create database glad;
Query OK, 1 row affected (0.00 sec)
MariaDB [(none)]> use glad;
Database changed
AGGREGATE FUNCTIONS:
I. Create a library database with book name, author name, access code, date of access, publisher name, and price as the fields.
MariaDB [glad]> create table library(Bname varchar(15),Bcode int,doa date,Pname varchar(20),Price decimal(7,2));
Query OK, 0 rows affected (0.17 sec)
MariaDB [glad]> desc library;
++
Field   Type   Null   Key   Default   Extra
++
Bname   varchar(15)   YES     NULL
Bcode   int(11)   YES     NULL
doa   date   YES     NULL
Pname   varchar(20)   YES     NULL
Price   decimal(7,2)   YES
++
5 rows in set (0.00 sec)
MariaDB [glad]> insert into library values('Programming in C',1110,'2016-07-12','Pearson',550); Query
OK, 1 row affected, 1 warning (0.02 sec)
MariaDB [glad]> insert into library values('Core Java',1111,'2016-07-22','ttk',650);

```
Query OK, 1 row affected (0.02 sec)
MariaDB []> insert into library values ('Networks',1112,'2016-07-13','Pearson',700); Query OK,
1 row affected (0.03 sec)
MariaDB [glad] > insert into library values ('Database', 1113, '2016-09-18', 'Pearson', 750); Query
OK, 1 row affected (0.02 sec)
MariaDB [glad] > insert into library values ('C++',1114,'2016-09-03','Pearson',600); Query
OK, 1 row affected (0.02 sec)
MariaDB [glad] > select * from library;
+----+
| Bname | Bcode | doa | Pname | Price |
+-----+
| Programming in | 1110 | 2016-07-12 | Pearson | 550.00 |
| Core Java | 1111 | 2016-07-22 | ttk | 650.00 |
| Networks | 1112 | 2016-07-13 | Pearson | 700.00 |
| Database | 1113 | 2016-09-18 | Pearson | 750.00 |
| C++ | 1114 | 2016-09-03 | Pearson | 600.00 |
+-----+
5 rows in set (0.00 sec)
1. Select the average price of all books in the library database.
MariaDB [glad] > select avg(price) from library;
+----+
| avg(price) |
+----+
| 650.000000 |
```

+----+

1 row in set (0.03 sec)
2. Select the name of the book with maximum price in the given database.
MariaDB [glad]> select bname,max(price) as 'price' from library;
++
bname   price
++
Database   750.00
++
1 row in set (0.04 sec)
3. Select the book with minimum price.
MariaDB [glad]> select bname,min(price) as 'price' from library;
++
bname   price
++
Programming in   550.00
++
1 row in set (0.00 sec)
4. Count the number of records in the library database.
MariaDB [glad]> select count(bname) from library;
++
count(bname)

+----+

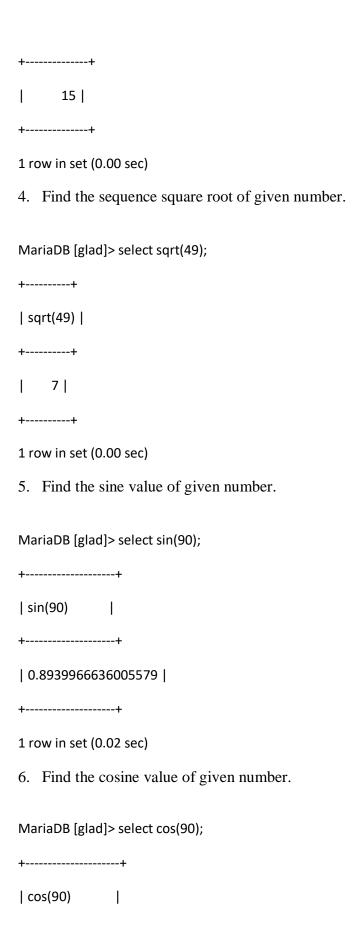
5 |

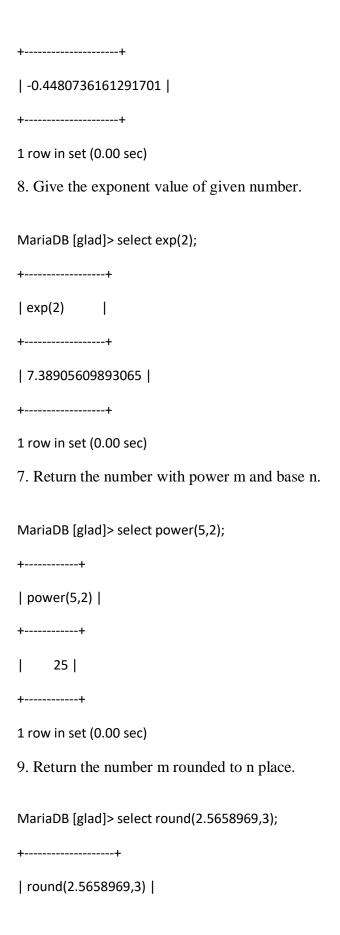
++
1 row in set (0.00 sec)
4. Print the total (total cost of all the books) estimate of the library book.
MariaDB [glad]> select sum(price) from library;
++
sum(price)
++
3250.00
++
1 row in set (0.00 sec)
II. CHARACTER FUNCTIONS:
1. Convert the initial letters of given string to capital letter.
MariaDB [glad]> select lower('INDIA');
++
lower('INDIA')
+
india
++
1 row in set (0.02 sec)
2. Convert the upper case letter to lower case.
MariaDB [glad]> select upper('india');
++
upper('india')
++

INDIA
++
1 row in set (0.00 sec)
4. Ltrim (or) remove the leftmost substring.
MariaDB [glad]> select ltrim(' india');
++
Itrim(' india')
++
india
++
1 row in set (0.00 sec)
5. Rtrim (or) remove the rightmost substring.
MariaDB [glad]> select rtrim('india ');
rtrim('india ')
++
india
++
1 row in set (0.00 sec)
6. Allocate the total number of space and character to the filled.
MariaDB [glad]> select lpad('india',10,'&');
++
lpad('india',10,'&')
++

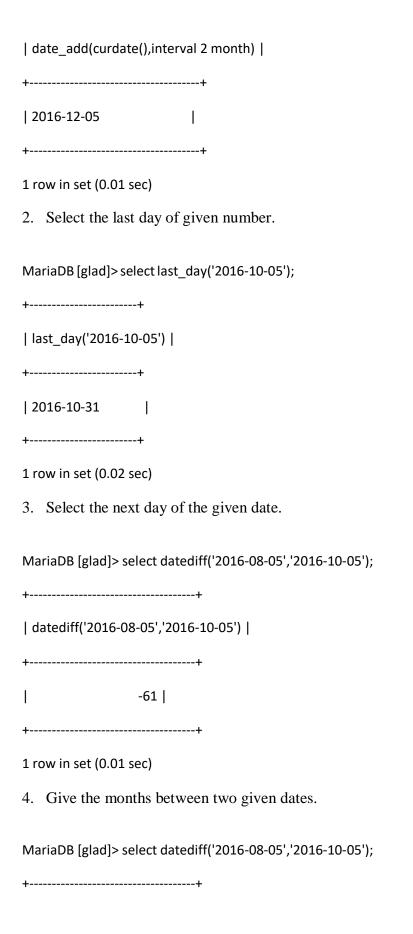
+	
	+
1 row in set	(0.00 sec)
7. Allocate	the nspaces then add given character at rightmost positi
MariaDB [gl	ad]> select rpad('india',10,'&');
+	<del>+</del>
rpad('india	9',10,'&')
+	+
india&&&&	&&
+	+
1 row in set	(0.00 sec)
8. Replace	the string searched by the replace character.
	ad]> select replace('tajmahal','taj','raj'); +
replace('ta	ajmahal','taj','raj')
	<del>-</del>
	+ 
+   rajmahal	+   +
+   rajmahal	+
+	(0.00 sec)
+	(0.00 sec)
+	(0.00 sec) character in the string and replace it by another character
+   rajmahal   rajmahal   row in set   Delete a   MariaDB [gl	(0.00 sec)  character in the string and replace it by another character ad]> select substring('sathyabama university',11,20);

university
+ <del>+</del>
1 row in set (0.01 sec)
III. NUMERIC FUNCTIONS:
1. Convert given negative values to positive values.
MariaDB [glad]> select abs(-13);
++
abs(-13)
++
13
++
1 row in set (0.01 sec)
2. Convert a decimal number to next higher integer.
MariaDB [glad]> select ceil(15.62);
++
ceil(15.62)
++
16
++
1 row in set (0.00 sec)
3. Convert the decimal number with immediate lower number.
MariaDB [glad]> select floor(15.62);
++
floor(15.62)





++
2.566
++
1 row in set (0.00 sec)
10. In a number cut the remaining part (or) after n digit.
MariaDB [glad]> select truncate(2.5658969,3);
++
truncate(2.5658969,3)
++
2.565
++
1 row in set (0.00 sec)
11. Find the modulus of number.
MariaDB [glad]> select mod(15,4);
++
mod(15,4)
++
3
++
1 row in set (0.00 sec)
IV. DATE FUNCTIONS:
1. Add a date with certain number.
MariaDB [glad] > select date_add(curdate(),interval 2 month);



datediff('2016-08-05','2016-10-05')
++
-61
++
1 row in set (0.01 sec)
6. Select the greatest of two dates.
MariaDB [glad]> select greatest('2016-08-05','2016-10-05');
++
greatest('2016-08-05','2016-10-05')
++
2016-10-05
++
1 row in set (0.00 sec)
7. Give the current date.
MariaDB [glad]> select sysdate();
++
sysdate()
++
2016-10-05 09:54:58
++
1 row in set (0.00 sec)