Math Functions –Perform operation over numeric value

POWER() – power() returns the value of a number raised to the power of another number. The synonym of power() is pow().

Syntax - pow(m,n)
m A number which is the base of the exponentiation
n A number which is the exponent of the exponentiation

Mysql >select pow(2,3);

8

Mysql > select pow(2.37,3.45);

19.6282
select power(rollno, 2) from students;

ROUND() - the round() function returns a number rounded to a certain number of decimal places.
Syntax - ROUND(column_name,decimals)
column_name -Required. The field to round
decimals -Required, Specifies the number of decimals to be returned
Default decimal place is 0 position if we not specify

```
mysql> select round(454.352,2);
+------------------+
| round(454.352,2) |
+------------------+
|           454.35 |
+------------------+
1 row in set (0.00 sec)

mysql> select round(454.352,0);
+------------------+
| round(454.352,0) |
+------------------+
|              454 |
+------------------+
1 row in set (0.00 sec)
```

```
MySQL 5.6 Command Line Client
mysql> select * from club;
+-------+----------+-----+----------+----------+
| mcode | mname    | age | fees     | type     |
+-------+----------+-----+----------+----------+
| M1    | Anshuman |  35 | 7000.45  | Monthly  |
| M2    | Aradhya  |  25 | 8000.67  | Monthly  |
| M3    | Sushmita |  42 | 24000.8  | Yearly   |
| M4    | Poorvika |  27 | 12000.2  | Quaterly |
| M5    | Kritka   |  30 | 14000.7  | Yearly   |
| M6    | Sandesh  |  32 | 15000.7  | Monthly  |
| M7    |  Manohar |  40 | 40030.8  | Yearly   |
+-------+----------+-----+----------+----------+
7 rows in set (0.00 sec)

mysql> SELECT mname, ROUND(fees) AS 'Fees' FROM club;
+----------+-------+
| mname    | Fees  |
+----------+-------+
| Anshuman |  7000 |
| Aradhya  |  8001 |
| Sushmita | 24001 |
| Poorvika | 12000 |
| Kritka   | 14001 |
| Sandesh  | 15001 |
|  Manohar | 40031 |
+----------+-------+
```

MOD() – The MOD() function returns the remainder of one number divided by another. The following shows the syntax of the MOD() function: Syntax - MOD(dividend,divisor)

Dividend - is a literal number or a numeric expression to divide. Divisor- is a literal number or a numeric expression by which to divide the dividend

Mysql >SELECT MOD(11, 3);

2

Mysql >SELECT MOD(10.5, 3);

1.5

```
mysql> SELECT MOD(30,7);
+-----------+
| MOD(30,7) |
+-----------+
|         2 |
+-----------+
1 row in set (0.00 sec)
```

For given table item Display remainder after dividing rate by quantity

```
MySQL 5.6 Command Line Client
mysql> select * from item;
+-----+-------+------+-----+
| ino | iname | rate | qty |
+-----+-------+------+-----+
|   1 | soap  |  124 |  50 |
|   2 | salt  |  112 | 140 |
|   3 | sugar |  118 |  60 |
|   4 | oil   |  280 |  60 |
|   5 | paste |  160 | 110 |
+-----+-------+------+-----+
5 rows in set (0.00 sec)

mysql> SELECT MOD(rate,qty) AS 'Remainder Rate/Qty' FROM item;
+--------------------+
| Remainder Rate/Qty |
+--------------------+
|                 24 |
|                112 |
|                 58 |
|                 40 |
|                 50 |
+--------------------+
5 rows in set (0.00 sec)
```

ABS(): Returns the absolute value of a number.

Mysql > **SELECT ABS(-10); -- Result: 10**

SQRT(): Returns the square root of a number.

Mysql > **SELECT SQRT(25); -- Result: 5**

RAND(): Returns a random floating-point number between 0 and 1.

Mysql > **SELECT RAND(); -- Result: Random value between 0 and 1**