



# SELECT with CASE Clause Syntax

```
SELECT column1, column2,  
      CASE  
        WHEN Condition1 THEN result1  
        WHEN Condition2 THEN result2  
        WHEN Condition3 THEN result3  
        ELSE result alias_name  
      END AS alias_name  
      FROM table_name;
```



# List of Arithmetic Functions in MySQL

- PI()
- ROUND()
- CEIL()
- FLOOR()
- POW()
- SQRT()
- RAND()
- ABS()
- SIGN()
- SIN()
- COS()
- TAN()
- ASIN()
- ACOS()
- ATAN()
- ATAN2()
- COT()
- RADIANS()



# List of String Functions in MySQL

- UPPER() / UCASE()
- LOWER() / LCASE()
- LENGTH()
- CHAR\_LENGTH()
- CONCAT()
- CONCAT\_WS()
- LTRIM()
- RTRIM()
- TRIM()
- POSITION()
- LOCATE()
- INSTR()
- SUBSTRING() / SUBSTR()
- MID()
- SUBSTRING\_INDEX()
- LEFT()
- RIGHT()
- LPAD()
- RPAD()
- SPACE()
- REVERSE()
- REPEAT()
- REPLACE()
- STRCMP()
- FIELD()
- FIND\_IN\_SET()
- FORMAT()
- HEX(str)



# List of Date Functions in MySQL

- CURDATE
- CURRENT\_DATE
- SYSDATE
- NOW
- LAST\_DAY
- DAY
- DAYNAME
- DAYOFMONTH
- DAYOFWEEK
- DAYOFYEAR
- WEEK
- WEEKDAY
- WEEKOFYEAR
- YEAR
- YEARWEEK
- EXTRACT
- DATE\_ADD
- ADDDATE
- MAKEDATE
- DATE\_SUB
- SUBDATE
- DATEDIFF
- TO\_DAYS
- FROM\_DAYS
- PERIOD\_ADD
- PERIOD\_DIFF
- DATE\_FORMAT
- STR\_TO\_DATE



# List of Time Format

02:30:27:00 PM

## Time Format

Hour

%h (01 to 12)

%H (00 to 23)

%g (1 to 12)

%G (0 to 23)

Minutes

%i (00 to 59)

Seconds

%s (00 to 59)

Microseconds

%f (000000 to 999999)

Meridiem

%p (AM or PM)



# ALTER Syntax

Add Column

```
ALTER TABLE table_name  
ADD column_name datatype;
```

Modify Column

```
ALTER TABLE table_name  
MODIFY column_name datatype;
```

Delete Column

```
ALTER TABLE table_name  
DROP COLUMN column_name datatype;
```



# Advantages & Disadvantages of VIEW :

## Advantages :

I

- Simplify complex query.
- Provides Extra layer of Security.

## Disadvantages :

- Performance Decreases.
- Depedency on Table.



# INDEX Syntax

```
CREATE INDEX index_name  
ON table_name(column1, column2, column3, .... );
```

```
DROP INDEX index_name  
ON table_name;
```



## Guidelines of Index :

- Automatically creates the indexes for PRIMARY KEY and UNIQUE columns.
- Index columns that you frequently use to retrieve the data.
- Index columns that are used for joins to improve join performance.
- Avoid columns that contain too many NULL values.
- Small tables do not require indexes.





# List of Parameters with Extract Function

- MICROSECOND
- SECOND
- MINUTE
- HOUR
- DAY
- WEEK
- MONTH
- QUARTER
- YEAR
- SECOND\_MICROSECOND
- MINUTE\_MICROSECOND
- MINUTE\_SECOND
- HOUR\_MICROSECOND
- HOUR\_SECOND
- HOUR\_MINUTE
- DAY\_MICROSECOND
- DAY\_SECOND
- DAY\_MINUTE
- DAY\_HOUR
- YEAR\_MONTH

# List of addunits

- MICROSECOND
- SECOND
- MINUTE
- HOUR
- DAY
- WEEK
- MONTH
- QUARTER
- YEAR
- SECOND\_MICROSECOND
- MINUTE\_MICROSECOND
- MINUTE\_SECOND
- HOUR\_MICROSECOND
- HOUR\_SECOND
- HOUR\_MINUTE
- DAY\_MICROSECOND
- DAY\_SECOND
- DAY\_MINUTE
- DAY\_HOUR
- YEAR\_MONTH



# List of Date Format

25/03/2020

## Date Format

Day

Month

Year

Week

%d (01 to 31)

%M (January)

%Y (2019)

%a (Mon)

%e (0 to 31)

%b (Jan to Dec)

%y (19)

%W (Monday)

%D (st, nd, rd or th)

%m (00 to 12)

%w (0 to 6)

%j (001 to 366)

%c (0 to 12)



# List of Time Format

02:30:27:00 PM

## Time Format

Hour

`%h` (01 to 12)`%H` (00 to 23)`%g` (1 to 12)`%G` (0 to 23)

Minutes

`%i` (00 to 59)

Seconds

`%s` (00 to 59)

Microseconds

Meridiem

`%p` (AM or PM)