

INDEX :

<i>Serial No.</i>	<i>Topic</i>	<i>Page No.</i>
1	Date Function	2
2	Time Function	4
3	Alter Command	5
4	Drop And Truncate	6
5	View	7
6	Index	9

Date Functions :-

```
--> Date Functions :-  
  
select current_date()  
  
select curdate() --> Both will gives the current date.  
  
  
select sysdate() --> Gives the system date and time -> 2023-02-17 17:35:20  
  
  
select now() --> Gives date and time as above but from the server.  
  
  
select date("2023-02-17 17:35:20") --> Gives the date from the given date and time.  
  
  
select month("2023-02-17 17:35:20") --> Gives the month from the given date and time.  
  
  
select monthname("2023-02-17 17:35:20")--> Gives the month name from the given date & time.  
  
  
select year("2023-02-17 17:35:20") --> Gives the year from the given date and time.  
  
  
select day("2023-02-17 17:35:20") as day --> Gives the day from the given date and time.  
  
  
select dayofmonth("2023-02-17 17:35:20") --> This function also gives day.  
  
  
select dayname("2023-02-17 17:35:20") as "Day Name" --> Given the name of the day.  
  
  
select dayofweek("2023-02-17 17:35:20") --> Gives the day of the week in number.  
  
  
select week("2023-02-17 17:35:20") --> Given the week number as per given date.  
  
  
select dayofyear("2023-02-17 17:35:20") --> Gives the day of the year.  
  
  
select last_day("2023-02-17 17:35:20") --> Gives the last date of the month of given date.  
  
  
select extract(month from "2023-02-17 17:35:20") --> Gives the month from the given data  
and all the above data by using different keywords.  
  
  
select adddate("2023-02-17", interval 6 day) as total; --> Adds 6 days in the given date.
```

```

select date_add("2023-02-17", interval 3000 minutes) as total;--> Adds minutes accordingly.

select subdate("2023-02-17", interval 10 month) as total; --> Subtract months from date.

select datediff("2023-02-17", "2019-03-21") as total; --> Gives the difference b/w the
dates.

--> Way to use date_format() function :-
select date_format("2023-02-18", "%d/%m/%Y, %W"); --> Output :- 18/02/2023, Saturday
select date_format("2023-02-18", "%e-%c-%y, %a"); --> Output :- 18-2-23, Sat
select date_format("2023-02-18", "%D/%M/%Y, %w"); --> Output :- 18th/February/2023, 6
select date_format("2023-02-18", "%j/%b/%Y, %a"); --> Output :- 049/Feb/2023, Sat

--> Way to use time fomate :-
select date_format("2023-02-18 5:35:40:20", "%d/%m/%Y, %h:%i:%s %p") as "Given Date";
--> Output :- 18/02/2023, 05:35:40 AM

select date_format("2023-02-18 5:35:40:20", "%d/%m/%Y, %H:%i:%s% %p") as "Given Date";
--> Output :- 18/02/2023, 05:35:40:000000 AM

--> Way to use str_to_date() function :-
select str_to_date("July 07 1970", "%M %d %Y"); --> Output :- 1970-07-07 (In MySQL format)

```

Time Functions :-

```
select current_time(); --> Gives the current time from the server.
select curtime(); --> Same as above.

select current_timestamp(); --> Output :- 2023-02-18 05:51:59 -> (Gives date and time both)

select localtime(); --> Word same as above.
select localtimestamp(); --> This also works same as above.
select time("2023-02-17 17:35:20") as ti; --> Output :- 17:35:20 (Gives time only)
select hour("2023-02-17 17:35:20") as ti; --> Output :- 17 (Gives hour only)
select minute("2023-02-17 17:35:20") as ti; --> Output :- 35 (Gives minute only)
select second("2023-02-17 17:35:20") as ti; --> Output :- 20 (Gives second only)

select timediff("17:35:20", "04:50:23") as ti; --> Output :- 12:44:57 (time difference)

select addtime("17:35:20", "04:50:23") as ti; --> Output :- 12:44:57 (adds both the time)

select subtime("17:35:20", "04:50:23") as ti; --> Output :- 12:44:57 (subtract time)

select maketime(05, 25, 30) as time; --> Output :- 05:25:30

select timestamp("2023-02-17", "04:50:23") as time; --> Output :- 2023-02-17 04:50:23

select time_to_sec("04:50:23") as ti; --> Output :- 17423 in seconds

select sec_to_time(31536) as ti; --> Output :- 08:45:36
```

Alter Command :-

--> Add column in a table.

```
alter table myserver  
add myCln int;
```

--> Changing data type of a column.

```
alter table myserver  
modify city char(20);
```

--> Adding constraints to a column.

```
alter table myserver  
add unique(myCln);
```

--> Changing column position.

```
alter table myserver  
modify city varchar(10)  
after gender;
```

--> Delete column.

```
alter table myserver  
drop column cityId int;
```

--> Renaming column.

```
alter table myserver  
Change city myCity varchar(20);
```

--> Rename Table.

```
alter myserver  
Rename MyServerPack;
```

Drop And Truncate :-

--> 'Drop' command delete whole table while 'Truncate' command delete only all data within the table, and then table only contain table columns.

--> Way to use truncate command :-

```
truncate table myserver;
```

--> Way to use drop command :-

```
drop table myserver;
```

View :-

--> We can save any query with the help of 'view' command.
--> View name must not be matched with any other table name in the database.

```
create view myView
as
select *from myserver as m join city as c
on m.cityId = c.cid
where c.cityName = "Gzp"
order by m.name;
```

--> This will store above query in myView and we can access it as follow :-

```
select *from myView
```

--> If we need to change anything in the view.

```
alter view myView
as
select *from
myserver as m inner join city as c
on m.cityId = c.id
inner join emp as e
on m.eID = e.SNo;
```

--> Another way to same as above :-

```
create or replace view myView
as
select *from
myserver as m inner join city as c
on m.cityId = c.id
inner join emp as e
on m.eID = e.SNo;
```

--> If we need to rename the view :-

```
rename table myView
to myViewRenamed;
```

--> If we need to delete the view :-

```
drop view myViewRenamed;
```

--> Advantages of View :-

--> 1. Simplify complex query.

--> 2. Provides extra layer of security.

--> Disadvantages of View :-

--> 1. Performance decreases.

--> 2. Depedency on table.

Index :-

--> Guidelines of index :-

- > 1. Automaticallu creates the indexes for primary key and unique columns.
- > 2. Index columns that you frequently use to retrieve the data.
- > 3. Index columns that are used for joins to improve join performance.
- > 4. Avoid columns that contain too many NULL values.
- > 5. Small tables do not require indexes.

--> Way to create 'Index' :-

```
create index myIDX on myserver(age);
```

--> Way to get how many 'indexes' are used in the given table :-

```
show index from myserver;
```

--> Way to delete 'indexes' form the table :-

```
drop index myIDX on myserver;
```