MY SQL PROJECT

what is data

- Data is Raw fact which describes the attribute (properties) of an entity (object , living or non living things)

What is database

- Database is a place or medium where the data is stored in systematic and organized manner.

- We can perform four operations on the database they are,

  Create

  Read

  Update

  Delete

These operations are know as CRUD operations.

What is SQL

Structured Query Language

Sql is structured query language, which is a computer language for storing, manipulating and retrieving data stored in relational database.

Sql is the standard language for relation database system. All relational database management systems like Mysql, MS Access, oracle , sybase, informix, postgres and sql server use Sql as standard database language

What is DBMS

- DBMS is a system which is used to maintain and manage database.
- DBMS provides two important features security and authorization.
- In DBMS data is stored in the form of files. Query language is used to communicate or interact with the DBMS.

RDBMS

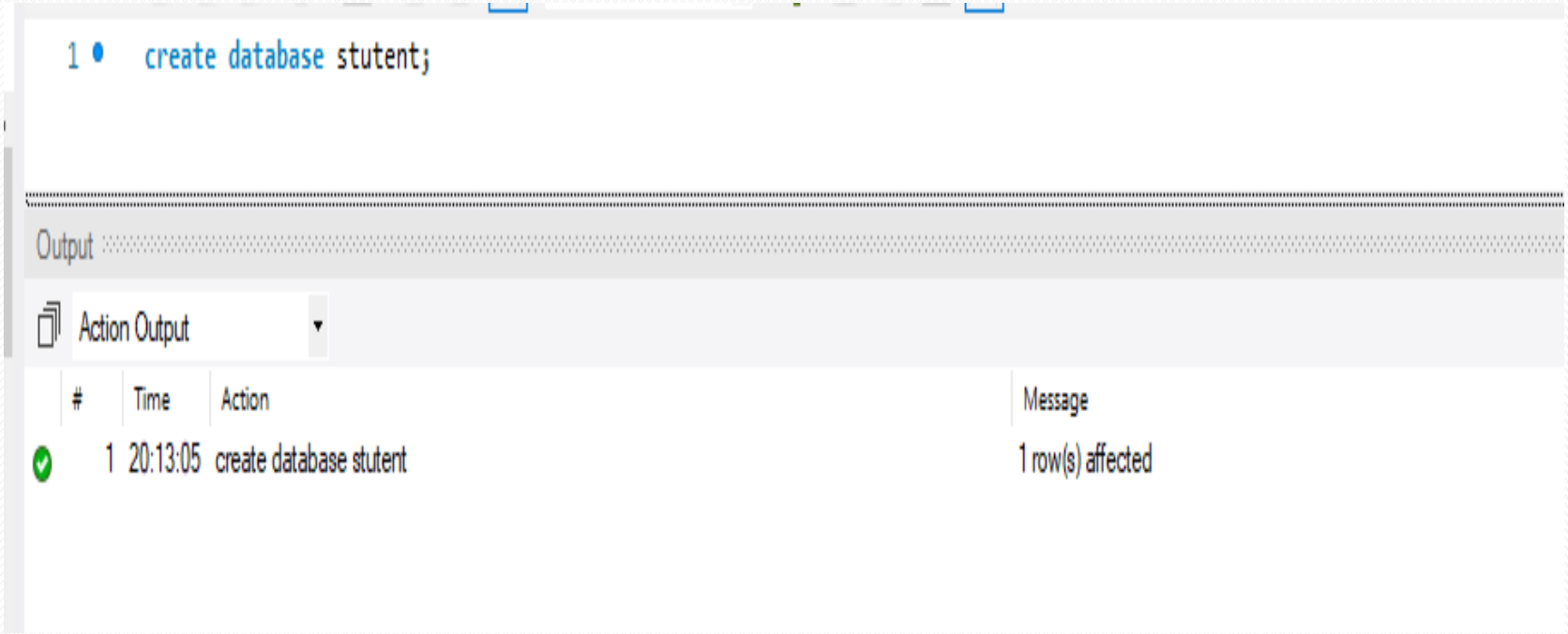
- Relational modal was invented by a computer scientist E.F CODD.
- In relational modal all the data should be stored in the form of tables.
- If any DBMS follows the relational modal it becomes RDBMS.

Main Commands

- Create database
- Show database
- Drop database
- Alter database
- Show tables
- Insert values
- Drop tables
- Alter table
- Alter table modify
- Alter table drop
- Alter table rename
- Update table
- delete statement

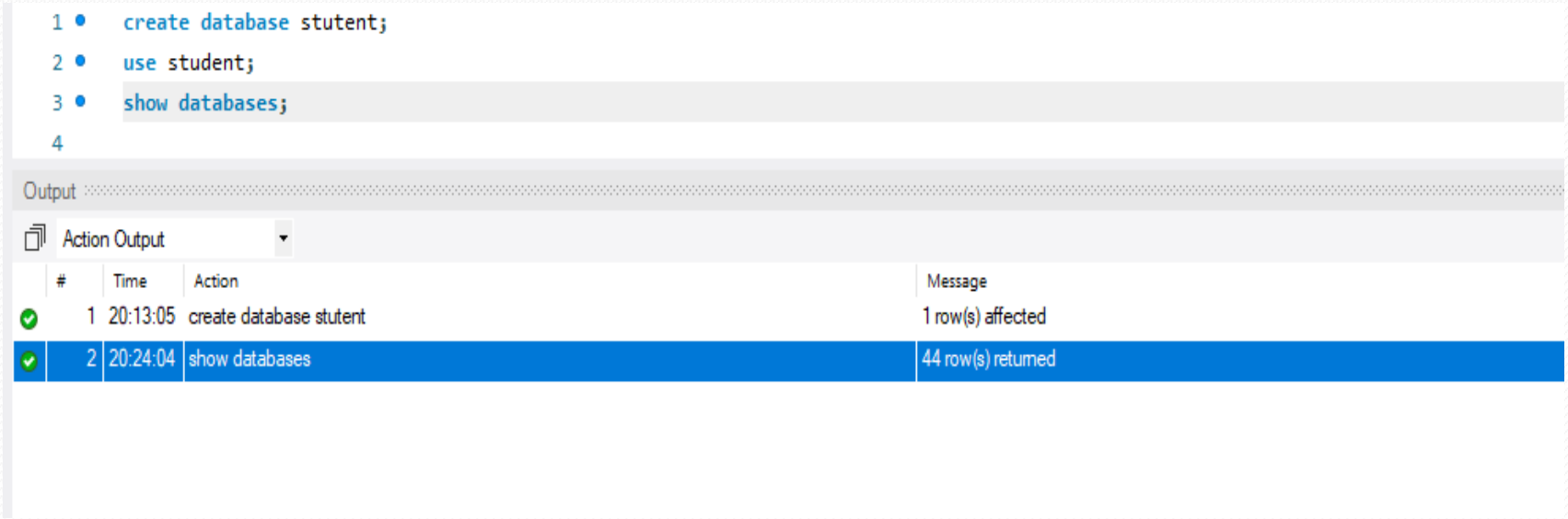
Create database

- The create database is used to create a new SQL database



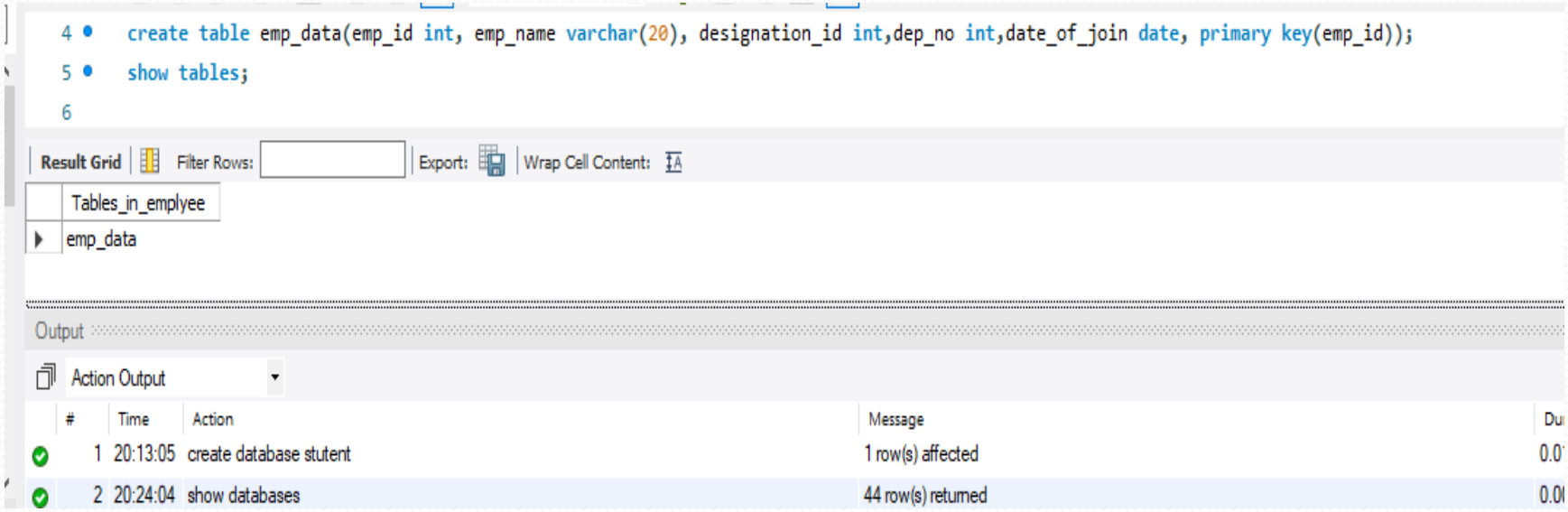
Show database

- Lists the database that are accessible by the MYSQL RDBMS



Create tables , show tables

- The create table statement is used to create a new table in a database



Insert values

- **Commands:** insert into emp_det values

```
4  create table emp_det(emp_id int, emp_name varchar(20), designation_id int,dep_no int,date_of_join date, primary key(emp_id));
5  show tables;
6  insert into emp_det values
7  (17001, 'Geetha', 3001, 50, '2022/05/10'),
8  (17002, 'Guru', 3002, 50, '2022/05/12'),
9  (17003, 'Gokul' , 3003 , 50 , '2022/05/15'),
10 (17004, 'Mani' , 3004 , 60 , '2022/05/20'),
11 (17005, 'Moorthy' , 3005 , 50 , '2022/05/23'),
12 (17006, 'Amutha' , 3006 , 50 , '2022/06/05'),
13 (17007, 'Jaga' , 3003 , 70 , '2022/06/06'),
14 (17008, 'Pavithra' , 3007 , 60 , '2022/06/07'),
15 (17009, 'Arthi' , 3005 , 50 , '2022/06/08'),
16 (17010, 'Kabilan' , 3006 , 70 , '2022/06/09'),
17 (17011, 'Manasi' , 3001 , 70 , '2022/06/10');
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

emp_id	emp_name	designation_id	dep_no	date_of_join
17001	Geetha	3001	50	2022-05-10
17002	Guru	3002	50	2022-05-12
17003	Gokul	3003	50	2022-05-15
17004	Mani	3004	60	2022-05-20
17005	Moorthy	3005	50	2022-05-23

Alter table

- Command :alter table emp_det add email varchar(200);

```
41 •  select * from emp_det;
42 •  alter table emp_det add email varchar(200);
43 •  select * from emp_det;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

emp_id	emp_name	designation_id	dep_no	date_of_join	email
17001	Geetha	3001	50	2022-05-10	NULL
17002	Guru	3002	50	2022-05-12	NULL
17003	Gokul	3003	50	2022-05-15	NULL
17004	Mani	3004	60	2022-05-20	NULL
17005	Moorthy	3005	50	2022-05-23	NULL
17006	Amutha	3006	50	2022-06-05	NULL
17007	Jaga	3003	70	2022-06-06	NULL
17008	Pavithra	3007	60	2022-06-07	NULL
17009	Arthi	3005	50	2022-06-08	NULL

My SQL General Functions

- Where

  Command: select * from emp_det where dep_no = 50;

```
41 •  select * from emp_det;
42 •  alter table emp_det add email varchar(200);
43 •  select * from emp_det;
44 •  select * from emp_det where dep_no = 50;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

emp_id	emp_name	designation_id	dep_no	date_of_join	email
17001	Geetha	3001	50	2022-05-10	NULL
17002	Guru	3002	50	2022-05-12	NULL
17003	Gokul	3003	50	2022-05-15	NULL
17005	Moorthy	3005	50	2022-05-23	NULL
17006	Amutha	3006	50	2022-06-05	NULL
17009	Arthi	3005	50	2022-06-08	NULL
17012	Suja	3002	50	2022-06-11	NULL
17016	Madhavi	3002	50	2022-06-15	NULL
NULL	NULL	NULL	NULL	NULL	NULL

or

- Or command is used to display only the both values are mentioned in the table

Command: select * from emp_det where dep_no=20 or emp_id=3

```
41 •  select * from emp_det;
42 •  alter table emp_det add email varchar(200);
43 •  select * from emp_det;
44 •  select * from emp_det where dep_no = 50;
45 •  select * from emp_det where dep_no=50 or designation_id=3002;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

emp_id	emp_name	designation_id	dep_no	date_of_join	email
17001	Geetha	3001	50	2022-05-10	NULL
17002	Guru	3002	50	2022-05-12	NULL
17003	Gokul	3003	50	2022-05-15	NULL
17005	Moorthy	3005	50	2022-05-23	NULL
17006	Amutha	3006	50	2022-06-05	NULL
17009	Arthi	3005	50	2022-06-08	NULL
17012	Suja	3002	50	2022-06-11	NULL
17016	Madhavi	3002	50	2022-06-15	NULL
17017	Swetha	3002	70	2022-06-16	NULL

emp_det 8

And

- Display the values by comparing the colum depands upon the command is used

command : select * from emp_det where dep_no = 70 and designation_id = 3005;

```
45 •  select * from emp_det where dep_no=50 or designation_id=3002;
46 •  select * from emp_det where dep_no = 70 and designation_id = 3005;
47
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

emp_id	emp_name	designation_id	dep_no	date_of_join	email
17024	Devi	3005	70	2022-06-23	NULL
17029	Priya	3005	70	2022-06-28	NULL
17031	srinivasan	3005	70	2022-06-30	NULL
NULL	NULL	NULL	NULL	NULL	NULL

emp_det 10 ×

In

- Command: select * from emp_det where emp_name in (‘geetha’,’guru’);

```
45 •  select * from emp_det where dep_no=50 or designation_id=3002;
46 •  select * from emp_det where dep_no = 70 and designation_id = 3005;
47 •  select * from emp_det where emp_name in ('geetha','guru');
48
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

emp_id	emp_name	designation_id	dep_no	date_of_join	email
17001	Geetha	3001	50	2022-05-10	NULL
17002	Guru	3002	50	2022-05-12	NULL
NULL	NULL	NULL	NULL	NULL	NULL

emp_det 11 ×

Not In

- Command: select * from emp_det where emp_name not in (‘mani’,’arthi’);

```
46 •  select * from emp_det where dep_no = 70 and designation_id = 3005;
47 •  select * from emp_det where emp_name in ('geetha','guru');
48 •  select * from emp_det where emp_name not in ('mani','arthi');
49
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

emp_id	emp_name	designation_id	dep_no	date_of_join	email
17001	Geetha	3001	50	2022-05-10	NULL
17002	Guru	3002	50	2022-05-12	NULL
17003	Gokul	3003	50	2022-05-15	NULL
17005	Moorthy	3005	50	2022-05-23	NULL
17006	Amutha	3006	50	2022-06-05	NULL
17007	Jaga	3003	70	2022-06-06	NULL
17008	Pavithra	3007	60	2022-06-07	NULL
17010	Kabilan	3006	70	2022-06-09	NULL
17011	Manasi	3001	70	2022-06-10	NULL
17012	Suja	3002	50	2022-06-11	NULL
17013	Arun	3003	60	2022-06-12	NULL
17014	Deepa	3004	60	2022-06-13	NULL
17015	Sindhu	3005	80	2022-06-14	NULL
17016	Madhavi	3002	50	2022-06-15	NULL

emp_det 12

Count

- Command: select branch_id count(amount) total_salary from sal_det group by branch_id

```
82 •  select * from emp_det where dep_no = 70 and designation_id = 3005;
83 •  select * from emp_det where emp_name in ('geetha','guru');
84 •  select * from emp_det where emp_name not in ('mani','arthi');
85 •  select branch_id, count(amount) total_salary from sal_det group by branch_id;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

branch_id	total_salary
241	8
242	7
243	10
244	8

Distinct

- Command: select distinct amount from sal_det;

```
85 •  select branch_id, count(amount) total_salary from sal_det group by branch_id;
86 •  select Distinct amount from sal_det;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

amount
35000
14000
28000
18000
30000
23000

Order by

- Command: select * from emp_det order by emp_name
- Command : select * from emp_det order by emp_name desc

```
85 • select branch_id, count(amount) total_salary from sal_det group by branch_id;
86 • select Distinct amount from sal_det;
87 • select * from emp_det order by emp_name ;
88
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

emp_id	emp_name	designation_id	dep_no	date_of_join	email
17006	Amutha	3006	50	2022-06-05	NULL
17009	Arthi	3005	50	2022-06-08	NULL
17013	Arun	3003	60	2022-06-12	NULL
17014	Deepa	3004	60	2022-06-13	NULL
17025	Devan	3006	60	2022-06-24	NULL
17024	Devi	3005	70	2022-06-23	NULL
17032	ganesan	3006	80	2022-07-01	NULL
17001	Geetha	3001	50	2022-05-10	NULL
17003	Gokul	3003	50	2022-05-15	NULL

emp_det 15 x

Output

```
87 • select * from emp_det order by emp_name ;
88 • select * from emp_det order by emp_name desc;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

emp_id	emp_name	designation_id	dep_no	date_of_join	email
17027	Venkatesh	3003	80	2022-06-26	NULL
17021	Veeramani	3002	80	2022-06-20	NULL
17023	Veera	3002	80	2022-06-22	NULL
17017	Swetha	3002	70	2022-06-16	NULL
17012	Suja	3002	50	2022-06-11	NULL
17031	srinivasan	3005	70	2022-06-30	NULL
17015	Sindhu	3005	80	2022-06-14	NULL
17018	Selvi	3002	70	2022-06-17	NULL
17028	Raja	3004	60	2022-06-27	NULL

emp_det 16 x

Output

Group by

- Command: select designation_id ,count(dep_no) from emp_det group by designation_id;

```
87 •  select * from emp_det order by emp_name ;
88 •  select * from emp_det order by emp_name desc;
89 •  select designation_id , count(dep_no) from emp_det group by designation_id;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

designation_id	count(dep_no)
3001	4
3002	10
3003	4
3004	3
3005	6
3006	5
3007	1

Limit

- Command: select * from emp_det 0,3;
- Command: select * from emp_det order by emp_name limit 0,6;

```
90 •    select * from emp_det limit 0,3;
91 •    select * from emp_det order by emp_name limit 0,6;
92
93
94
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: | Fetch rows:

emp_id	emp_name	designation_id	dep_no	date_of_join	email
17001	Geetha	3001	50	2022-05-10	NULL
17002	Guru	3002	50	2022-05-12	NULL
17003	Gokul	3003	50	2022-05-15	NULL
NULL	NULL	NULL	NULL	NULL	NULL

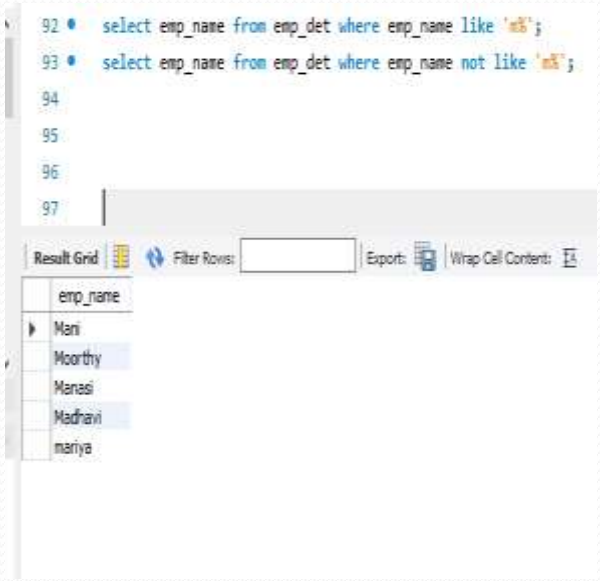
```
90 •    select * from emp_det limit 0,3;
91 •    select * from emp_det order by emp_name limit 0,6;
```

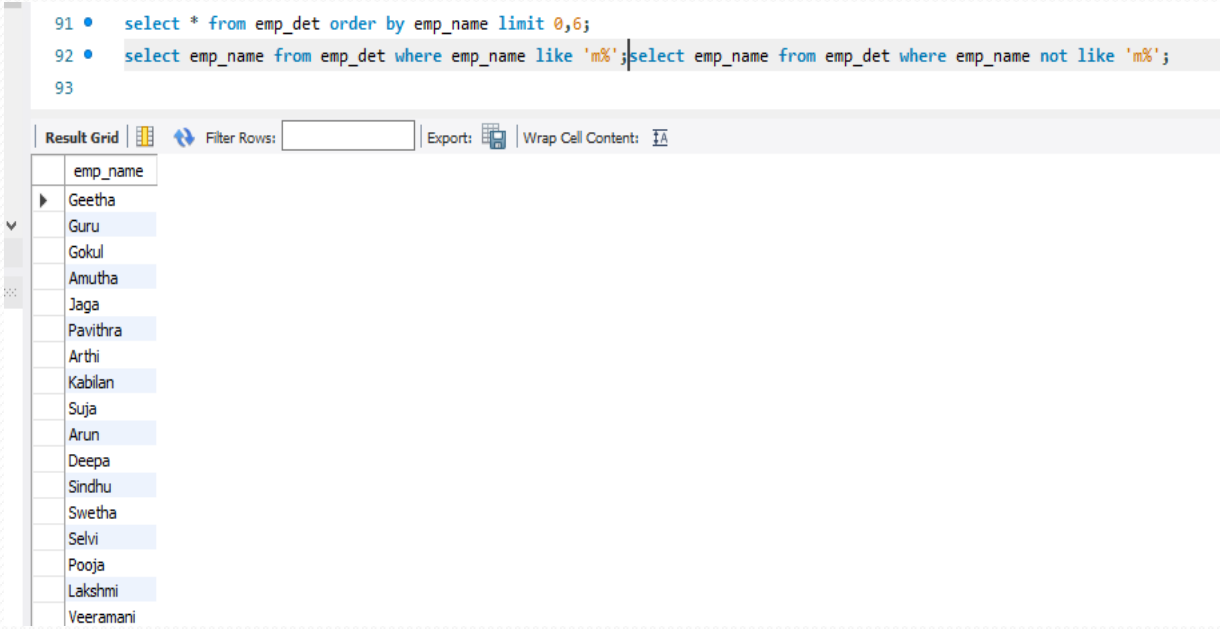
Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: | Fetch rows:

emp_id	emp_name	designation_id	dep_no	date_of_join	email
17006	Amutha	3006	50	2022-06-05	NULL
17009	Arthi	3005	50	2022-06-08	NULL
17013	Arun	3003	60	2022-06-12	NULL
17014	Deepa	3004	60	2022-06-13	NULL
17025	Devan	3006	60	2022-06-24	NULL
17024	Devi	3005	70	2022-06-23	NULL
NULL	NULL	NULL	NULL	NULL	NULL

Like

- Command: select emp_name from emp_det where emp_name like ‘m%’
- Command: select emp_name from emp_det where emp_name not like ‘m%’





Between

- Commend: select * from sal_det where amount between 12000 and 25000

```
91 •  select * from emp_det order by emp_name limit 0,6;
92 •  select emp_name from emp_det where emp_name like 'm%';select emp_name from emp_det where emp_name not like 'm%';
93 •  select * from sal_det where amount between 12000 and 25000;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

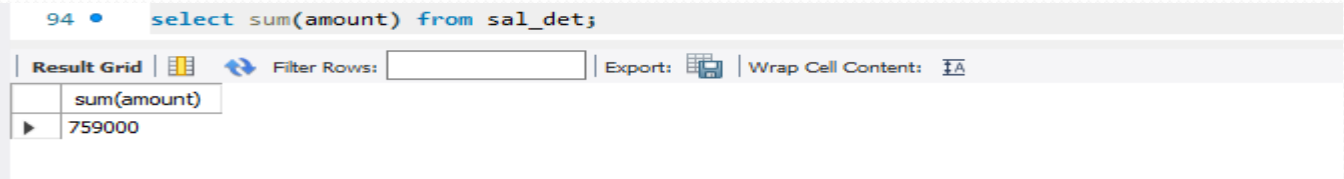
sal_id	emp_id	sal_date	branch_id	Amount
18002	17002	2022-06-12	241	14000
18004	17004	2022-06-20	242	18000
18006	17006	2022-07-06	241	23000
18008	17008	2022-07-08	242	18000
18010	17010	2022-07-10	243	23000
18012	17012	2022-07-12	241	14000
18014	17014	2022-07-14	242	18000
18016	17016	2022-07-16	241	14000
18017	17017	2022-07-17	243	14000
18018	17018	2022-07-18	243	14000
18019	17019	2022-07-19	243	14000
18020	17020	2022-07-20	243	14000
18021	17021	2022-07-21	244	14000
18022	17022	2022-07-22	244	14000
18023	17023	2022-07-23	244	14000
18025	17025	2022-07-25	242	23000
18028	17028	2022-07-28	242	18000

sal_det 22

My SQL calculate functions

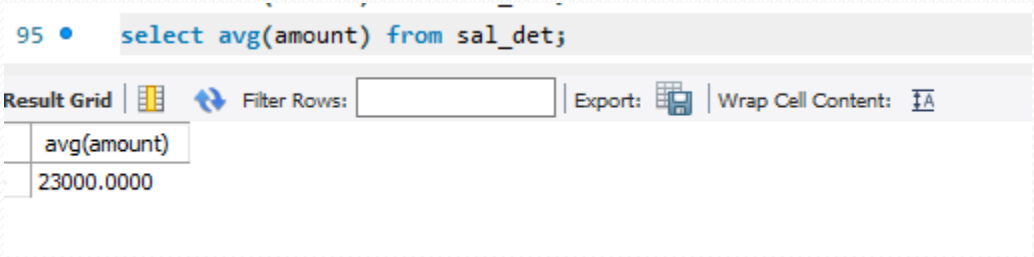
Sum

Command: select sum(amount) from sal_det;



Average

Command: select avg(amount) from sal_det;



Min

Command: select min(amount) from sal_det;

```
96 •  select min(amount) from sal_det;
```

Result Grid | Filter Rows:

min(amount)
14000

Max

Command: select max(amount) from sal_det;

```
97 •  select max(amount) from sal_det;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

max(amount)
35000

Count

Command: select count(amount) from sal_det;

```
98 •  select count(amount) from sal_det;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

count(amount)
33

My SQL string function

Lcase

Command: select lower(emp_name) from emp_det;

Ucase

Command: selcet upper(emp_name) from emp_det;

Left

Command: select left (emp_name,2) as string_left from emp_det;

```
101 •  select left (emp_name,2) as string_left from emp_det;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

string_left
Ge
Gu
Go
Ma
Mo
Am
Ja
Pa

Right

Command: select right(emp_name,4) as string_right from emp_det;

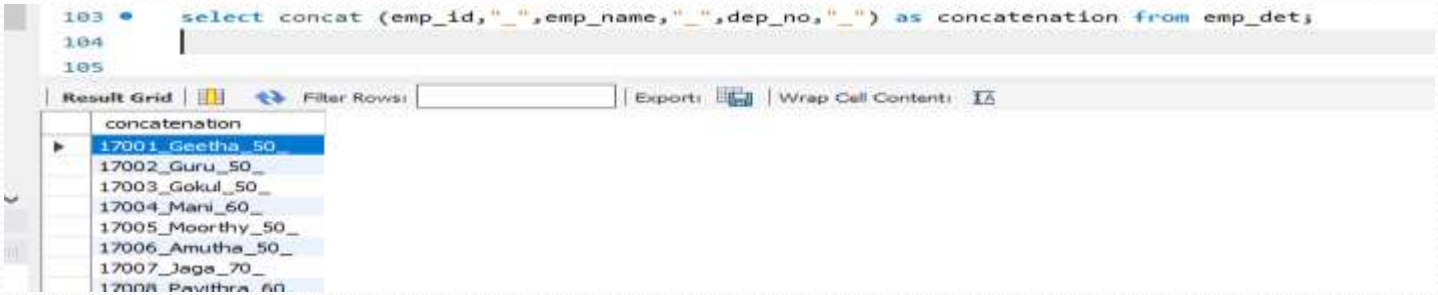
```
102 •  select right(emp_name,4) as string_right from emp_det;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

string_right
etha
Guru
okul
Mani
rthy
utha
Jaga
thra
rthi
ilan

Concet

Command: select concet (emp_id,"_",emp_name,"_",dep_no,"_",) as concatenation from emp_det;



Trim

Command: select trim(branch_id) as trimmed from sal_det

Char_length

Command: select char_length(emp_name),emp_name as char_length from emp_det order by emp_name;

```
105 •   select char_length(emp_name),emp_name as char_length from emp_det order by emp_name;
106
107
108
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

char_length(emp_name)	char_length
6	Amutha
5	Arthi
4	Arun
5	Deepa
5	Devan

Mid

Command: select mid(emp_name 1,3) as midstring from emp_det;

```
106 •   select mid(emp_name ,1,3) as midstring from emp_det;
107
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

midstring
Gee
Gur
Gok
Man

Length

Command: select length(emp_name) as length_string from emp_det

```
107 •  select length(emp_name) as length_string from emp_det
108
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

length_string
6
4
5
4
7
6

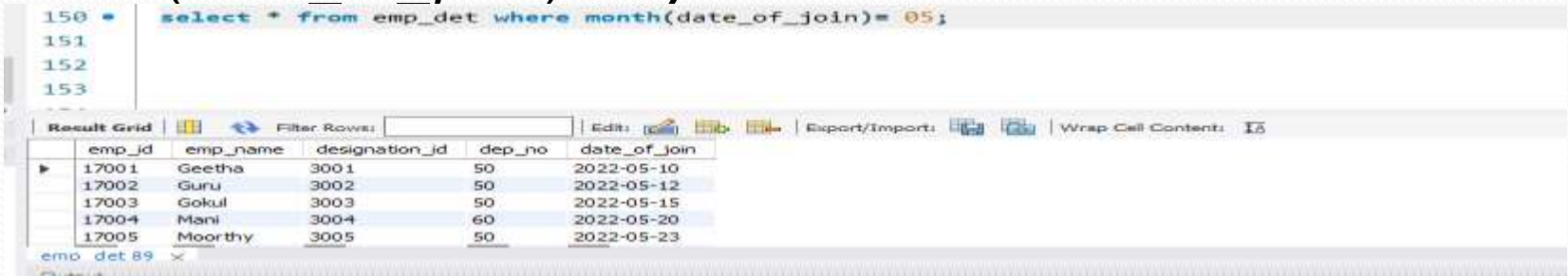
My SQL date functions

Date

Command: select* from emp_det where(date_of_join)='2022/05/12';

Month

Command: select * from emp_det where month(date_of_join)='05'



Year

Command: select * from emp_data where year(date_of_join)='1981';

```
151 •  select * from emp_det where year(date_of_join)=2022;
152
153
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

emp_id	emp_name	designation_id	dep_no	date_of_join
17001	Geetha	3001	50	2022-05-10
17002	Guru	3002	50	2022-05-12
17003	Gokul	3003	50	2022-05-15
17004	Mani	3004	60	2022-05-20
17005	Moorthy	3005	50	2022-05-23

Now

Command :select * , now() from emp_det;

```
152 •  select * , now() from emp_det;
153
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

emp_id	emp_name	designation_id	dep_no	date_of_join	now()
17001	Geetha	3001	50	2022-05-10	2024-01-28 23:23:55
17002	Guru	3002	50	2022-05-12	2024-01-28 23:23:55
17003	Gokul	3003	50	2022-05-15	2024-01-28 23:23:55
17004	Mani	3004	60	2022-05-20	2024-01-28 23:23:55
17005	Moorthy	3005	50	2022-05-23	2024-01-28 23:23:55

Datediff

Command : select *,datadiff(curdate(),date_of_join)/365 as emp_exp from emp_det

```
153 •  select *,datediff(curdate(),date_of_join)/365 as emp_exp from emp_det;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

emp_id	emp_name	designation_id	dep_no	date_of_join	emp_exp
17001	Geetha	3001	50	2022-05-10	1.7205
17002	Guru	3002	50	2022-05-12	1.7151
17003	Gokul	3003	50	2022-05-15	1.7068
17004	Mani	3004	60	2022-05-20	1.6932
17005	Moorthy	3005	50	2022-05-23	1.6849

Result 93

Timestampdiff

Command: select *,timestampdiff (year,date_of_join,sysdate()) as exp from emp_det

```
154 •  select *,timestampdiff(year,date_of_join,sysdate()) as exp from emp_det
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

emp_id	emp_name	designation_id	dep_no	date_of_join	exp
17001	Geetha	3001	50	2022-05-10	1
17002	Guru	3002	50	2022-05-12	1
17003	Gokul	3003	50	2022-05-15	1
17004	Mani	3004	60	2022-05-20	1
17005	Moorthy	3005	50	2022-05-23	1

Result 94

Output

Logical functions

If

Command : select * , if(amount >=35000,'high salary' ,'low salary') as sal_result from sal_det;

```
108 •  select * , if(amount >=35000,'high salary' ,'low salary') as sal_result from sal_det;
109
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

sal_id	emp_id	sal_date	branch_id	Amount	sal_result
18001	17001	2022-06-10	241	35000	high salary
18002	17002	2022-06-12	241	14000	low salary
18003	17003	2022-06-15	241	28000	low salary
18004	17004	2022-06-20	242	18000	low salary
18005	17005	2022-06-23	241	30000	low salary
18006	17006	2022-07-06	241	23000	low salary
18007	17007	2022-07-07	243	28000	low salary
18008	17008	2022-07-08	242	18000	low salary
18009	17009	2022-07-09	241	30000	low salary
18010	17010	2022-07-10	243	23000	low salary
18011	17011	2022-07-11	243	35000	high salary
18012	17012	2022-07-12	241	14000	low salary

If with and conditions

Command: select *, if((amount >= 35000) and (branch_id>=241),'high salary','low salary') as result from sal_det;

```
110 •   select *, if((amount >= 35000) or (branch_id>=241),'high salary','low salary') as result from sal_det;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

sal_id	emp_id	sal_date	branch_id	Amount	result
18001	17001	2022-06-10	241	35000	high salary
18002	17002	2022-06-12	241	14000	low salary
18003	17003	2022-06-15	241	28000	low salary
18004	17004	2022-06-20	242	18000	low salary
18005	17005	2022-06-23	241	30000	low salary
18006	17006	2022-07-06	241	23000	low salary
18007	17007	2022-07-07	243	28000	low salary
18008	17008	2022-07-08	242	18000	low salary
18009	17009	2022-07-09	241	30000	low salary
18010	17010	2022-07-10	243	23000	low salary
18011	17011	2022-07-11	243	35000	high salary
18012	17012	2022-07-12	241	14000	low salary

If with or conditions

Command: select *, if((amount >= 35000) or (branch_id>=241),'high salary','low salary') as result from sal_det;

```
110 •   select *, if((amount >= 35000) or (branch_id>=241),'high salary','low salary') as result from sal_det;
111
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

sal_id	emp_id	sal_date	branch_id	Amount	result
18001	17001	2022-06-10	241	35000	high salary
18002	17002	2022-06-12	241	14000	high salary
18003	17003	2022-06-15	241	28000	high salary
18004	17004	2022-06-20	242	18000	high salary
18005	17005	2022-06-23	241	30000	high salary
18006	17006	2022-07-06	241	23000	high salary
18007	17007	2022-07-07	243	28000	high salary
18008	17008	2022-07-08	242	18000	high salary
18009	17009	2022-07-09	241	30000	high salary
18010	17010	2022-07-10	243	23000	high salary
18011	17011	2022-07-11	243	35000	high salary
18012	17012	2022-07-12	241	14000	high salary

Join queries

Inner join:

Command: select * from emp_det inner join sal_det on emp_det.emp_id = sal_det.emp_id;

```
112 •  select * from emp_det inner join sal_det on emp_det.emp_id = sal_det.emp_id;
113 •  select * from emp_det left join sal_det on
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

emp_id	emp_name	designation_id	dep_no	date_of_join	sal_id	emp_id	sal_date	branch_id	Amount
17001	Geetha	3001	50	2022-05-10	18001	17001	2022-06-10	241	35000
17002	Guru	3002	50	2022-05-12	18002	17002	2022-06-12	241	14000
17003	Gokul	3003	50	2022-05-15	18003	17003	2022-06-15	241	28000
17004	Mani	3004	60	2022-05-20	18004	17004	2022-06-20	242	18000
17005	Moorthy	3005	50	2022-05-23	18005	17005	2022-06-23	241	30000
17006	Amutha	3006	50	2022-06-05	18006	17006	2022-07-06	241	23000
17007	Jaga	3003	70	2022-06-06	18007	17007	2022-07-07	243	28000
17008	Pavithra	3007	60	2022-06-07	18008	17008	2022-07-08	242	18000
17009	Arthi	3005	50	2022-06-08	18009	17009	2022-07-09	241	30000
17010	Kabilan	3006	70	2022-06-09	18010	17010	2022-07-10	243	23000
17011	Manasi	3001	70	2022-06-10	18011	17011	2022-07-11	243	35000
17012	Suja	3002	50	2022-06-11	18012	17012	2022-07-12	241	14000

Result 48

Left join

Command: select * from emp_det left join sal_det on emp_det.emp_id = sal_det.emp_id;

```
113 •    select * from emp_det left join sal_det on emp_det.emp_id = sal_det.emp_id;
114
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

emp_id	emp_name	designation_id	dep_no	date_of_join	sal_id	emp_id	sal_date	branch_id	Amount
17001	Geetha	3001	50	2022-05-10	18001	17001	2022-06-10	241	35000
17002	Guru	3002	50	2022-05-12	18002	17002	2022-06-12	241	14000
17003	Gokul	3003	50	2022-05-15	18003	17003	2022-06-15	241	28000
17004	Mani	3004	60	2022-05-20	18004	17004	2022-06-20	242	18000
17005	Moorthy	3005	50	2022-05-23	18005	17005	2022-06-23	241	30000
17006	Amutha	3006	50	2022-06-05	18006	17006	2022-07-06	241	23000
17007	Jaga	3003	70	2022-06-06	18007	17007	2022-07-07	243	28000
17008	Pavithra	3007	60	2022-06-07	18008	17008	2022-07-08	242	18000
17009	Arthi	3005	50	2022-06-08	18009	17009	2022-07-09	241	30000

Right join

Command: select * from emp_det right join sal_det on emp_det.emp_id=sal_det.sal_id;

```
114 •    select * from emp_det right join sal_det on emp_det.emp_id = sal_det.emp_id;
115
116
117
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

emp_id	emp_name	designation_id	dep_no	date_of_join	sal_id	emp_id	sal_date	branch_id	Amount
17001	Geetha	3001	50	2022-05-10	18001	17001	2022-06-10	241	35000
17002	Guru	3002	50	2022-05-12	18002	17002	2022-06-12	241	14000
17003	Gokul	3003	50	2022-05-15	18003	17003	2022-06-15	241	28000
17004	Mani	3004	60	2022-05-20	18004	17004	2022-06-20	242	18000
17005	Moorthy	3005	50	2022-05-23	18005	17005	2022-06-23	241	30000
17006	Amutha	3006	50	2022-06-05	18006	17006	2022-07-06	241	23000
17007	Jaga	3003	70	2022-06-06	18007	17007	2022-07-07	243	28000
17008	Pavithra	3007	60	2022-06-07	18008	17008	2022-07-08	242	18000

Procedures concepts

```
delimiter //
create procedure store_data1()
Begin
select *, case
when amount >= 35000 then 'high salary‘
when amount>= 25000 then 'average salary ‘
when amount >= 10000 then 'low salary‘
end as sal_grade from sal_det;
select * from sal_det where amount = 30000;
select * from sal_det where amount <= 20000;
end //
delimiter ;
call store_data1 ;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

sal_id	emp_id	sal_date	branch_id	Amount	sal_grade
18001	17001	2022-06-10	241	35000	high salary
18002	17002	2022-06-12	241	14000	low salary
18003	17003	2022-06-15	241	28000	average salary
18004	17004	2022-06-20	242	18000	low salary
18005	17005	2022-06-23	241	30000	average salary
18006	17006	2022-07-06	241	23000	low salary
18007	17007	2022-07-07	243	28000	average salary
18008	17008	2022-07-08	242	18000	low salary
18009	17009	2022-07-09	241	30000	average salary
18010	17010	2022-07-10	243	23000	low salary
18011	17011	2022-07-11	243	35000	high salary

Result 63 | Result 64 | Result 65

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

sal_id	emp_id	sal_date	branch_id	Amount
18005	17005	2022-06-23	241	30000
18009	17009	2022-07-09	241	30000
18015	17015	2022-07-15	244	30000
18024	17024	2022-07-24	243	30000
18029	17029	2022-07-29	243	30000
18031	17031	2022-07-31	243	30000

135

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

sal_id	emp_id	sal_date	branch_id	Amount
18002	17002	2022-06-12	241	14000
18004	17004	2022-06-20	242	18000
18008	17008	2022-07-08	242	18000
18012	17012	2022-07-12	241	14000
18014	17014	2022-07-14	242	18000
18016	17016	2022-07-16	241	14000
18017	17017	2022-07-17	243	14000
18018	17018	2022-07-18	243	14000
18019	17019	2022-07-19	243	14000
18020	17020	2022-07-20	243	14000
18021	17021	2022-07-21	244	14000

Result 63 | Result 64 | Result 65

Triggers

An SQL trigger is a database object that is associated with a table and automatically executes a set of SQL statements when a specific event occurs on that table

Triggers timings;

- before insert
- after insert
- before update
- after update
- alter delete

Before insert

```
129
130    delimiter //
131 •  create trigger salary_checking1
132    before insert on sal_det
133    for each row
134    if new<= 20000 then
135    set new.amount =null;
136    end if //
137    delimiter ;
138 •  insert into sal_det values
139    (18001,17001,'2022/06/10',241,35000),
140    (18002,17002,'2022/06/12',241,14000),
141    (18003,17003,'2022/06/15',241,28000);
142
```

Alter insert

```
delimiter //
create trigger emp_backup
after insert on emp_det
for each row
begin
insert into emp_backup (emp_id emp_name,designation_id,dep_no)values
(new.emp_id ,new emp_name,new designation_id,new.dep_no);
end
delimiter ;
select * from emp_backup
```

Emp_id	Emp_name	Designation_id	Dep_no	Date_of_join
17001	Geetha	3001	50	NULL
17002	Guru	3002	50	NULL
17003	Gokul	3003	50	NULL
17004	Mani	3004	60	NULL
17005	Moorthy	3005	50	NULL


Thank
you!