SQL QURIES

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DDL (DATA DIFINITION LANGUAGE)

DDL میں ہم

- Create Table
- ALTER Table
- Drop Table
- Truncate table
- Rename

کرسکتے ہیں

1-TABLE بنانے کیلیئے ہم یہ Code لکھتے ہیں۔

```
create table employee
 (
 emp_id int;
 first_name varchar (50),
 last_name varchar (50),
 salary int,
 );
```

2-اگر ہمTABLE کا Logical Structureدیکھنا چاہتے ہیں

```
describe employee;
```

3-اگر ہم کسی TABLEکو addکرنا چاہتے ہیں

Altar Command

```
alter table employee add contact int;
 Select*from employee;
```

TRUNCATE Command

4- Recordsکو Deleteکرنا ہو تو ٹیبل میں سے۔

```
truncate table employee;
 select*from employee;
```

DROP Command:

5-اگر ہم TABLEکو DELETEکرنا ہو

```
alter table employee  drop  column contact;
 select*from employee;
```

DML (DATA MANIPULATION LANGUAGE)

DMLسے ہم نے جو DATA STRUCTURE لکھی ہوئی ہوتی ہے اسے

- Insertکر سکتے ہیں
- Updateکر سکتے ہیں
- Deleteکر سکتے ہیں

6- Insertکرنے کیلیئے ہم یہ Codeلکھتے ہیں۔ Valuesکو جب addکرتے ہیں

```
insert into employee (emp_id,first_name,last_name,salary) values
('9','shoaib','malik','500');
 insert into employee (emp_id, first_name,last_name,salary) values
('7','junaid','prince','700');
 insert into employee (emp_id,first_name,last_name,salary)  values
('8','fraz','javed','900');
 Select*from employee;
```

Note:

Varchar (50) and INT is data type

UPDATE Command:

7- UPDATE Commands میں ہم کسی بھی جگہ پر کوئی بھی Values لکھ سکتے ہیں۔

For Example:

(emp_id,first_name,last_name,salary)ان میں کوئی دوسری Valuesکو STORE کروانا ہو۔

```
update employee set last_name = 'mohsin' where emp_id = 7;
 select*from employee;
```

DELETE Command:

8- اس Command میں کوئی بھی Record Delete کر سکتے ہیں

```
delete from  employee where emp_id in (7);
 select*from employee;
```

جب دو Recordsکو Delete کرنا ہو تو

```
delete from  employee where emp_id in (7,9);
select*from employee;
```

9- MAX Salary Findکرنے کیلئے

```
select max (salary) from employee;
```

10- AVG Salary Findکرنے کیلئے

```
select avg(salary) from employee;
```

11- MIN Salary Findکرنے کیلئے

```
Select min(salary) from employee;
```

12- SUM Salary Findکرنے کیلئے

```
select sum(salary) from employee;
```

13- Count RECORDS Findکرنے کیلئے .

```
select count (*) from employee;
```

14-اس Command میں ہم یہ FIND کریں گے کہ کس SALARY کی EMPLOYEE زیادہ ہے۔

```
select emp_id from employee where salary =
(select Max(salary) from employee);
```

15-اس Command میں ہم 2nd Max Salary کو Find کرتے ہیں۔

```
(select max(salary) from employee where salary <>
(select max(salary) from employee));
```

TCL (TRANSECTION CONTROL)

- Commit
- Rollback
- Save point

16- ہمیں کوئی Records Condition کی Base پر اٹھا نا ہو تو

```
select*from employee where emp_id=7;
 select*from employee where salary=900;
 select*from employee where first_name='junaid';
 select *from employee where last_name='shahid';
```

- And Operator

17-ہم AND Operation اس لیئے USE کرتے ہیں ہماری دونو ں CONDITION کو TRUE ہونا چاہئے۔

```
select*from employee where first_name='junaid' and last_name='prince';
 select*from employee where first_name='fraz' and salary=900;
```

- OR Operator

18-ہم OR Operation اس لیئے USE کرتے ہیں ہماری دونو ں CONDITION کو درست مان کر EXECUTE کر لے ۔

```
select*from employee where emp_id= 9 Or salary=900;
```

- NOT operator

```
select*from employee where first_name='fraz' and salary !=900;
```

SPECIAL Operator

19. Find Range:

```
select*from employee where salary between 700 and 900;
```

20. Find String data type:

```
select*from employee where first_name like'junaid';
```

21. Check the attributes is null:

```
select*from employee where salary is null;
```

22. Represent the specific Values:

```
select*from employee where salary in (700,900);
```

23. To Find the Unique Values:

```
select distinct(salary) from employee;
select distinct (first_name) from employee;
```

24. Having Clause (SQL):

```
select avg(salary), dept from employee group by dept having count (dept)>=2;
```

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ORDER by Clause

25. For DESCENDING Order:

```
select*from employee order by salary desc;
```

26. For ASCENDING Order:

```
select*from employee order by salary asc;
```

CODE:

```
create table employee(
emp_id int,
first_name varchar (50),
last_name Varchar (50),
Salary int,
);
 insert into employee (emp_id,first_name,last_name,salary) values ('9','shoaib','malik','500');
 insert into employee (emp_id, first_name,last_name,salary) values ('7','junaid','prince','700');
 insert into employee (emp_id,first_name,last_name,salary) values ('8','fraz','javed','900');
 insert into employee (emp_id,first_name,last_name,salary) values ( '6','usman','shahid','800');
 Select*from employee;

 alter table employee add contact int;
 select*from employee;

 alter table employee drop column contact;
select*from employee;



 select*from employee where emp_id=7;
 select*from employee where salary=900;
 select*from employee where first_name='junaid';
 select *from employee where last_name='shahid';
```

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```
select*from employee where first_name='junaid' and last_name='prince';
select*from employee where first_name='fraz' and salary=900;
select*from employee where emp_id= 9 Or salary=900;
select*from employee where emp_id=9 and salary<=500;
select*from employee where first_name='junaid' and salary >=700;

select*from employee where salary between 700 and 900;
select*from employee where first_name like'junaid';
select*from employee where salary is null;
select*from employee where salary in (700,900);
select distinct(salary) from employee;
select distinct (first_name) from employee;

select max (salary) from employee;
select avg(salary) from employee;
Select min(salary) from employee;
select sum(salary) from employee;
select count (*) from employee;

select emp_id from employee where salary =
(select Max(salary) from employee);

(select max(salary) from employee where salary <> (select max(salary) from employee));

select avg(salary), dept from employee group by dept having count (dept)>=2;

select*from employee order by salary desc;
select*from employee order by salary asc;
```