

Day 8 : 24 Oct 2024 CB FSD - Planning and UI Design

Open the terminal

```
sudo mysql -u root -p
```

Simplilearn

```
show databases;
```

```
use shopping_app
```

```
show tables;
```

Join : Join is use to retrieve more than one column from more than one table with condition ie PK and FK.

Inner join or equi join

It display only those records which present in both the table with link as PK and FK.

Select firsttablecolumnname,firsttablecolumnname.....,
secondtablecolumnname,secondtablecolumnname from
firsttablename **inner join** secondtablename on
firsttablenamecolumn=secondtablecolumnname

```
select emailid,typeofuser,accno,balance from user inner join  
accounts on emailid=userid;
```

left outer join : it display common as well as left or first table remaining records.

```
select emailid,typeofuser,accno,balance from user left outer join  
accounts on emailid=userid;
```

Right outer join : it display common as well as right or second table remaining records.

```
select emailid,typeofuser,accno,balance from user right outer join  
accounts on emailid=userid;
```

if table contains common column name ie PK in one table and FK in another table then we need to use table alias

```
select p.pid,p.pname,p.description,ot.qty from product p inner join  
orderitem ot on p.pid=ot.pid;
```

here p is table alias for product and ot is table alias for orderitem table.

Mysql functions

Function contains set of instruction to perform specific task.

Functional mainly divided into 2 types.

1. Pre defined or built in functions.
2. User defined functions

Pre defined functions

Divided into 2 types.

1. Single row function : this function functionality apply for each record independently.

upper()

lower()

length()

```
select pid,  
lower(pname),price,upper(description),length(description)  
from product;
```

```
select upper('akash');  
select length('AKASH') as numberOfChar;
```

```
select round(245.5678,2);
```

```
select now()           it display current date and time
```

```
select curdate()       it display current date
```

2. Multi row or aggregate function : this function functionality apply for more than one record base upon group.

count(), sum(), max(), min() and avg()

```
select count(pid) as total_record from product;
```

```
select sum(price) as total_price, max(price) as max_price, min(price) as min_price, avg(price) as avg from product
```

```
select sum(price*stock) as total_price, max(price) as max_price, min(price) as min_price, avg(price) as avg from product;
```

group by clause :

whenever we use aggregate function like sum, max,min,count and avg by default whole table is consider as one group.

Group by clause we can use with that column which contains duplicate records.

all order total

```
select sum(total) from orders;
```

sub group total by uid

```
select uid,sum(total) from orders group by uid;
```

group by using paymentmethod

```
select paymentmethod,sum(amount) total_amount,count(pid)  
total_transaction from payment group by paymentmethod;
```

order by clause

this clause use to display the record ascending or descending order using particular column value.

Lower to higher base upon price

```
select * from product order by price asc;
```

higher to lower base upon price

```
select * from product order by price desc;
```

TCL Transactional control language

If we do multiple DML Operation ie insert, delete and update.

All query executed successfully we on same table or different table we can do

commit()

If any thing go wrong we can execute

rollback()

some database if we do any DML operation. Those all operation consider as under transaction. Example in oracle DB.

But in mysql we need to **start transaction**.

If we want to transfer amount from steven to Leena account we need to execute two DML operation

Transaction successfully executed.

start transaction

update accounts set balance= balance-100 where accno=110011;

update accounts set balance= balance+100 where accno=110012;

select * from accounts;

commit;

Transaction failure.

start transaction

update accounts set balance= balance-50 where accno=110011;

update accounts set balance= balance+50 where accno=110015;

select * from accounts;

rollback;