CRUD - I

Hey everyone!

We start at 7:05 AM

Agenda

↳ CRUD operation.

- → Create
- → Read
  - → WHERE
  - → AND, NOT & OR
  - → IN, BETWEEN
  - → LIKE
  - → IS NULL
  - → ORDER BY
  - → LIMIT
- → Update
- → Delete

What is CRUD.

students.

id	name	fsp	batch
1	Ujjwal	100	1
2	Ajaay	25	1
3	Gayatri	75	2

What all type of operation can you do on data of this/any table

→ Update (U)
→ Delete (D)
→ Create (C)
→ Read (R)

} CRUD

↓

Sakila

Sakila database overview

↳ Digital video rental store

C: Create

→ put new data in a table

Statement → INSERT.

Q create a new record in film table.

```
        → create data                    → table name
INSERT into {table_name} (
        {column_names}  → column
) VALUES
  (  ______________ .  ),
  (                    ),
  (                    );
```

R: Read

Statement → select.

```
select *  → fetch me all the columns.
  from {table_name};
```

```
select * from film;
select title, release-year from film.
```

⇒ Let see how these queries might work internally

select * from table_name

table_name = [{ }, { } , ... { }]

ans = [ ]

```
for row in table_name:
    ans.add(row)

print(ans)
```

select title, film_id from film

table_name = [{ }, { } . . . . . { }]

ans = [ ]

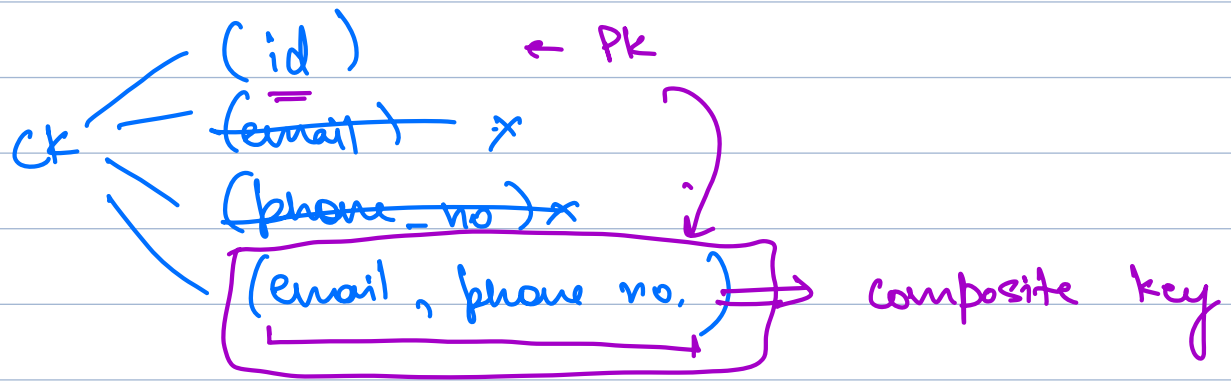
```
for row in table_name:
    ans.add(row)

for row in ans:
    print(row['title'], row['film_id'])
```

[BREAK till 08:17 AM]

Composite keys.

Students.

id	name	email	phone_no	batch_id



(id, name, batch_id)

(name, batch_id) ==

DISTINCT.

1. distinct should be very first thing after select
2. distinct is applied to pair/set of values.

select distinct rating, release_year from film;

```
table_name = [ { }, { }, ------ { } ]
ans = [ ]

for each row in table_name :
    ans.add( row)

filtered_ans = [ ]
  for each row in ans :
      filtered_ans.add(row[ rating], row[ release year ])

print ( set ( filtered_ans))
```

distinct → removes duplicates

⇒ it gets applied after the entire dataset is formed.

```
select * from film;
select title from film;

select 1;
select "Hello world";
```

Q Print title of every movie and alongside print (Hello) ?

Jab tak hai Jaan	hello
Tees Maar khan	hello
K3G	hello
Pushpa	hello

select title, 'Hello' from film.

Q Print name, length (in hours)

↑ value in table is in min

select title, length/60
from film ;

Table → film =
Duplicate table → film - copy ;

insert into film-copy
(col- names)
values
( ),

( ),
( );

non null

id name rating

insert into film_copy (
coln names) ?
= id, name
VALUES
select coln_names (id, name)
from film

insert into film_copy
values
Select * from film; =

insert into film_copy (title)
values
description
select ~~date~~ from film

WHERE CLAUSE

Select * from film;

where statement.

title, film_id

Q select * from film where rating = 'PG-13';

table-name - [{ }, { } - - - - - { }]

ans [ ] → intermediary table

```
for row in table_name :
    ① ans.add (row)    - - - → if rating == 'PG-13'
                              removing redundant
                              data ASAP.

for row in ans:
    ② print (row[title], row[film_id])
```

WHERE

⇒ allows to filter row based on condition.

table = [ ]

ans = [ ]

```
for each row in table :           // from
    if row matches condition:     // where
        ans.add(row)

for each row in ans:              // print
    print(row)
```