Class will start at 9:05 PM

Agenda,

Subgneries

Subgneries and IN

in FROM

ALL out ANY

Correlated Subgneries

Exists.

Students

	id	name	Psp	b_id		
<b>6</b> )			la f		7000 000 7	
<u>8</u>	I than	1 max	ous wh	students	psp greate	th 2.

X = max psp of batch 2 write a guing to return all students whose pspl > X select max (psp) from studeils where 6-id=02; select & students where psp > X enter psp > (

Select \* students

where psp > (

Select max (psp)

from students

where b-id=2

find all students whose psp > pspof

Olivated will id = 18;

select psp from students where id = 18;

Select \* from students where ps p > x

select & from students
where psp > C

To select psp
from students
where id = 18;

Wilhout Subguery. select \* from student wher psp > x ans = CJ for S : student syl sipsp > X

cens : add(s); return aus Will subgury. ans1 = [7] s: students { . psp = nullgrang for (S1: students)

grang S1. id = 18

psp = S1. psp i 'IP (S. PSP > PSP) , and add (S);

Reliem aus;  $O(n \times n) = O(n^2);$ 

IN

	users		J	
,	id	name	is_stud	is_ta [
XXXXV	1 23 4 5 6	Ishan Naman Horsish Rishi Alok	talse.  true  true  true  true  true  true  true	teul trul falsl false trul.
		•	)	

find the names of all the students who are also TA.

(1) find name of all TA

(2) Get student whose name are present in tas;

Select distinct name from users u where v. is-ta = time.

(2) Ishan, Namam, Alok.

Select name
from swors v
where v.15-stud = true
and v. name in [

Select name
from swers v

where v. 15-stud = true

and v. name in (

select distinct name
from users v where v. is-ta = true.

)

find all the students whose psp is not less than minpsp of any batch. The find min psp of every batch.

(2)  $\rightarrow x = \text{select war psp. from } \mathbf{1}$ (3) find all student whom psp > x select min (PSP) from students lay (b-id); mm\_psp b\_id Salat max (psp) from table,

from ( select min (PSP) aspsp.
from students
group ley (b-id); Selet \*

from studens

where psp >

Selet man (psp)

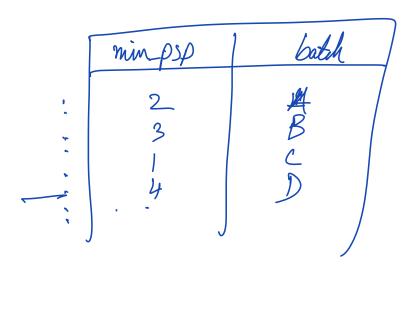
from ( Select min (PSP) aspsp.

Select min (PSP) aspsp.

from students ley (b-id);

minpsp. Note you need to give a name Subquery in FROM.

selet max (PSP)



Break of 10 nin.
resume at 10:30 pm

Select \*
from students
where psp > All

Select min (psp)
from students
group by (batch-id)

: PSP \$10, 20, 1, 703 PSP > 10 AND PSP > 20 AND PSP > 1 AND PSP > 10

7 PSP > ANY (10, 1, 20) TRUE

$$X = ANY (10, 20, 30)$$
 $111$ 
 $X = ANY (10, 20, 30)$ 

finid all students whose psp > any psp of their own batch. Outer Dury 1: > Get students whose psp > X timer. Query 2: > Find any psp of student's batch. Select # from

Students where

PSP > X Select ang (PSP)

from Students

where Catch id = 11

select & from

Students 5 where p s p >Select avg(psp)from students

Where  $bath_{-id} = s \cdot batth_{id}$ 

EXISTS

students

id name psp

tas

id name st\_id

id name St\_id

1 A NULL
2 B 2.
3 C NULL

find all students when are also a TA.

Select At

from student

where id in. (

Select S-id

from Tas

where S\_id TS NOTWUL

from students S.

Where ExTSTS

Select S-id

from tas

where tas sid = Sisd. INNER query returns Veven 1 row, then ExISTS is marked true. Students

Tas.

٢	Id	name	Ind	Nane	Sid
	1	A	9	A /	12
$\prec$	2	B	15/	8	W14
$\times$	3	C	6	C N	022
/ \ L	J				