SUB QUERY WITH WHERE CLAUSE

STUDENTS

ID	Name	PSP	BATCHID
1	A	96	1
2	B	90	2
3	C	95	1
4	D	91	1
5	E	94	2

TEACHING ASSISTANT

ID	STUDENTID
1	2
2	3
3	4
4	1
5	NULL

EMPLOYEE

ID	NAME	DEPARTMENT	SALARY

Q1: Find all the students who have a PSP greater than PSP of student with id = 18?

```
SELECT S1.*
FROM STUDENTS S1
INNER JOIN STUDENTS S2
ON S1.PSP > S2.PSP
WHERE S2.ID = 18;

SELECT * FROM STUDENTS WHERE PSP > (SELECT PSP FROM STUDENT WHERE ID =
18);
```

Q2: Print the name of students who are TA as well.

```
SELECT * FROM STUDENTS WHERE ID IN (SELECT STUDENTID FROM TA WHERE
STUDENTID IS NOT NULL);
```

Q3: Select all students having PSP greater than students of batch 3?

```
SELECT * FROM STUDENTS WHERE PSP > (SELECT MAX(PSP) FROM STUDENTS GROUP BY
BATCHID HAVING BATCHID = 3);

SELECT * FROM STUDENTS WHERE PSP > ALL(SELECT PSP FROM STUDENTS WHERE
BATCHID=3 )
```

Q4: Select all the employees having salary more than all employees of department HR?

```
SELECT * FROM EMPLOYEES WHERE SALARY > (SELECT MAX(SALARY) FROM EMPLOYEES
GROUP BY DEPARTMENT HAVING DEPARTMENT = "HR");

SELECT * FROM EMPLOYEES WHERE SALARY > ALL(SELECT SALARY FROM EMPLOYEES
WHERE DEPARTMENT= "HR" );
```

Q5: Select any student having PSP greater than students of batch 3?

```
SELECT * FROM STUDENTS WHERE PSP > ANY(SELECT PSP FROM STUDENTS WHERE
BATCHID=3 )
```

CO RELATED SUB QUERIES

Q6: Select all the students whose PSP is greater than average PSP of their batch.

```
SELECT * FROM STUDENTS S WHERE PSP > (SELECT AVG(PSP) FROM STUDENTS GROUP
BY BATCHID HAVING BATCHID = S.BATCHID);
```

SUB QUERY WITH FROM CLAUSE

ID	Name	PSP	AVERAGE_PSP	BATCHID

```
SELECT * FROM STUDENT S;

SELECT AVG(PSP) AS AVERAGE_PSP FROM STUDENTS GROUP BY BATCHID HAVING
BATCHID = S.BATCHID


SELECT S.*, (SELECT AVG(PSP) AS AVERAGE_PSP FROM STUDENTS GROUP BY BATCHID
HAVING BATCHID = S.BATCHID
) FROM STUDENT S;
```