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;