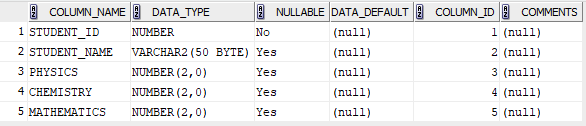
**AGGREGATE FUNCTIONS**

CREATE TABLE STUDENT\_EXP07\_CSA\_44 (STUDENT\_ID NUMBER PRIMARY KEY, STUDENT\_NAME VARCHAR2(50), PHYSICS NUMBER(2), CHEMISTRY NUMBER(2), MATHEMATICS NUMBER(2));



INSERT INTO STUDENT\_EXP07\_CSA\_44 (STUDENT\_ID, STUDENT\_NAME, PHYSICS, CHEMISTRY, MATHEMATICS) VALUES (1, 'JOSE', 15, 18, 40);

INSERT INTO STUDENT\_EXP07\_CSA\_44 (STUDENT\_ID, STUDENT\_NAME, PHYSICS, CHEMISTRY, MATHEMATICS) VALUES (2, 'PRANAV', 10, 12, 30);

INSERT INTO STUDENT\_EXP07\_CSA\_44 (STUDENT\_ID, STUDENT\_NAME, PHYSICS, CHEMISTRY, MATHEMATICS) VALUES (3, 'JIBIN', 20, 25, 35);

INSERT INTO STUDENT\_EXP07\_CSA\_44 (STUDENT\_ID, STUDENT\_NAME, PHYSICS, CHEMISTRY, MATHEMATICS) VALUES (4, 'ALWIN', 25, 20, 50);

INSERT INTO STUDENT\_EXP07\_CSA\_44 (STUDENT\_ID, STUDENT\_NAME, PHYSICS, CHEMISTRY, MATHEMATICS) VALUES (5, 'ALTHAF', 12, 15, 20);

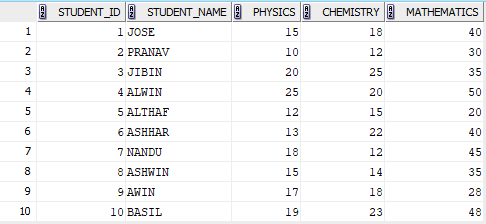
INSERT INTO STUDENT\_EXP07\_CSA\_44 (STUDENT\_ID, STUDENT\_NAME, PHYSICS, CHEMISTRY, MATHEMATICS) VALUES (6, 'ASHHAR', 13, 22, 40);

INSERT INTO STUDENT\_EXP07\_CSA\_44 (STUDENT\_ID, STUDENT\_NAME, PHYSICS, CHEMISTRY, MATHEMATICS) VALUES (7, 'NANDU', 18, 12, 45);

INSERT INTO STUDENT\_EXP07\_CSA\_44 (STUDENT\_ID, STUDENT\_NAME, PHYSICS, CHEMISTRY, MATHEMATICS) VALUES (8, 'ASHWIN', 15, 14, 35);

INSERT INTO STUDENT\_EXP07\_CSA\_44 (STUDENT\_ID, STUDENT\_NAME, PHYSICS, CHEMISTRY, MATHEMATICS) VALUES (9, 'AWIN', 17, 18, 28);

INSERT INTO STUDENT\_EXP07\_CSA\_44 (STUDENT\_ID, STUDENT\_NAME, PHYSICS, CHEMISTRY, MATHEMATICS) VALUES (10, 'BASIL', 19, 23, 48);



SELECT AVG(PHYSICS) AS CLASS\_AVG\_PHYSICS FROM STUDENT\_EXP07\_CSA\_44 ;



SELECT MAX(MATHEMATICS) AS HIGHEST\_MARKS\_MATHS FROM STUDENT\_EXP07\_CSA\_44 ;



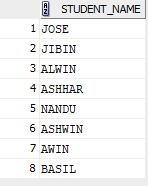
SELECT MIN(CHEMISTRY) AS LOWEST\_MARK\_CHEMISTRY FROM STUDENT\_EXP07\_CSA\_44 ;



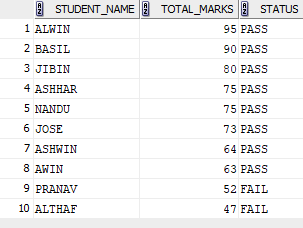
SELECT COUNT(\*) FROM STUDENT\_EXP07\_CSA\_44 WHERE PHYSICS >= 12;



SELECT STUDENT\_NAME FROM STUDENT\_EXP07\_CSA\_44 WHERE PHYSICS >= 12 AND CHEMISTRY >= 12 AND MATHEMATICS >= 25;



SELECT STUDENT\_NAME , PHYSICS + CHEMISTRY + MATHEMATICS AS TOTAL\_MARKS, CASE WHEN PHYSICS >= 12 AND CHEMISTRY >= 12 AND MATHEMATICS >= 25 THEN 'PASS' ELSE 'FAIL' END AS STATUS FROM STUDENT\_EXP07\_CSA\_44 ORDER BY TOTAL\_MARKS DESC;



SELECT (COUNT(CASE WHEN MATHEMATICS >= 25 THEN 1 END) \* 100 / COUNT(\*)) AS PASS\_PERCENTAGE\_MATHS FROM STUDENT\_EXP07\_CSA\_44;



SELECT (COUNT(CASE WHEN PHYSICS >= 12 AND CHEMISTRY >= 12 AND MATHEMATICS >= 25 THEN 1 END) \* 100 / COUNT(\*)) AS OVERALL\_PASS\_PERCENTAGE FROM STUDENT\_EXP07\_CSA\_44;



SELECT AVG(PHYSICS + CHEMISTRY + MATHEMATICS) AS CLASS\_AVERAGE FROM STUDENT\_EXP07\_CSA\_44 ;



SELECT COUNT(\*) FROM STUDENT\_EXP07\_CSA\_44 WHERE PHYSICS >= 12 AND CHEMISTRY >= 12 AND MATHEMATICS >= 25;

