ADBS LAB ASSIGNMENT EXPERIMENTS

# Experiment-1:-

1. INSERT INTO instructor VALUES

-> (10211, 'Smith', 'Biology', 66000);

1. DELETE FROM instructor WHERE ID = 10211;
2. SELECT \* FROM instructor WHERE dept\_name = 'History';
3. SELECT \* FROM instructor, teaches;
4. SELECT \* FROM instructor, teaches WHERE instructor.ID = teaches.ID;

OR

SELECT instructor FROM instructor INNER JOIN teaches ON instructor.ID = teaches.ID;

1. SELECT \* FROM instructor WHERE name LIKE '%dar%';
2. SELECT name FROM instructor WHERE salary>= 90000 AND salary <=100000;

# Experiment-2:-

1. SELECT \* FROM instructor ORDER BY salary;
2. SELECT \* FROM teaches WHERE (semester = 'Fall' AND year = 2017) OR (semester = 'Spring' AND year = 2018);
3. SELECT \* FROM teaches WHERE (semester = 'Fall' AND year = 2017) AND (semester = 'Spring' AND year = 2018);
4. SELECT \* FROM teaches WHERE (semester = 'Fall' AND year = 2017) AND NOT(semester = 'Spring' AND year = 2018);
5. INSERT INTO instructor VALUES

-> (10212, 'Tom', 'Biology', NULL);

1. SELECT \* FROM instructor WHERE salary IS NULL;
2. SELECT DISTINCT avg(salary) FROM instructor WHERE dept\_name = 'Comp Sci.'; Experiment-3:-
3. SELECT count(ID) as total\_teachers FROM teaches WHERE semester = 'Spring' AND year = 2018;
4. SELECT count(ID) FROM teaches;
5. SELECT dept\_name, avg(salary) as avg\_salary FROM instructor GROUP BY dept\_name;
6. SELECT dept\_name, avg(salary) as avg\_salary FROM instructor GROUP BY dept\_name HAVING avg\_salary > 42000;
7. SELECT \* FROM instructor WHERE name = 'Mozart' OR name = 'Einstein';
8. SELECT name FROM instructor WHERE salary > (SELECT MIN(salary) FROM instructor WHERE dept\_name = 'Biology');
9. SELECT name FROM instructor WHERE salary > (SELECT MAX(salary) FROM instructor WHERE dept\_name = 'Biology');
10. SELECT avg(salary) as avg\_salary, dept\_name FROM instructor GROUP BY dept\_name HAVING avg\_salary > 42000;

# Experiment-4:-

1. SELECT dept\_name FROM instructor GROUP BY dept\_name HAVING SUM(salary) > (SELECT AVG(total\_salary) FROM (SELECT SUM(salary) as total\_salary FROM instructor) as avg\_salary);
2. SELECT name, course\_id FROM instructor, teaches WHERE instructor.ID = teaches.ID;
3. SELECT DISTINCT name, course\_id FROM instructor LEFT JOIN teaches ON instructor.ID = teaches.ID;
4. CREATE view faculty AS SELECT ID, name, salary FROM instructor;
5. CREATE USER 'Arka'@'host' IDENTIFIED WITH authentication plugin BY '19072002';

* GRANT SELECT ON lab.faculty TO 'Arka'@'host';

# Experiment-5:-

1. CREATE VIEW faculty AS ID, name, dept\_name FROM instructor;
2. CREATE VIEW dept\_sal\_total AS SELECT dept\_name, SUM(salary) FROM instructor GROUP BY dept\_name;
3. SELECT \* FROM dept\_sal\_total;
4. CREATE ROLE [IF NOT EXISTS] student;
5. GRANT SELECT ON lab.faculty TO student;
6. CREATE USER 'Sneha'@'host' IDENTIFIED BY 'SnehaSut';

* GRANT student TO 'Sneha'@'host';

1. GRANT ALL PRIVILEGES ON lab.\* TO 'Sneha'@'host';

* FLUSH PRIVILEGES;

1. GRANT ALL PRIVILEGES ON \*.\* TO 'Sneha'@'localhost' WITH GRANT OPTION;
2. REVOKE ALL PRIVILEGES ON \*.\* FROM 'Sneha'@'localhost';
3. DROP ROLE IF EXISTS student;
4. INSERT INTO teaches2 VALUES(('10101', 'CS-101', 1, 'Summer', 2017),

('10101', 'CS-315', 1, 'Spring', 2018),

('10101', 'CS-347', 1, 'Winter', 2017),

('12121', 'FIN-201', 1, 'Spring', 2018),

('15151', 'MU-199', 1, 'Spring', 2018),

('22222', 'PHY-101', 1, 'Fall', 2017),

('32343', 'HIS-351', 1, 'Spring', 2018),

('45565', 'CS-101', 1, 'Spring', 2018),

('45565', 'CS-319', 1, 'Summer', 2018),

('76766', 'BIO-101', 1, 'Fall', 2017),

('76766', 'BIO-301', 1, 'Summer', 2018),

('83821', 'CS-190', 1, 'Winter', 2017),

('83821', 'CS-190', 2, 'Spring', 2017),

('83821', 'CS-319', 2, 'Fall', 2018),

('98345', 'EE-181', 1, 'Spring', 2017);

1. SELECT ID FROM teaches;
2. SELECT course\_id, sec\_id, semester, year FROM teaches;
3. DROP COLUMN ID FROM teaches;