1. Display all employee names (last name and first name separated by a comma and a space)

SELECT Lname || ', ' || Fname AS "Employee Name", Salary AS "Salary" FROM employee;

Output

Employee Name Salary

------------------------------------------ ----------

Brown, Chris 60000

Green, Alex 40000

Taylor, Jordan 45000

Martinez, Olivia 50000

Lopez, Sophia 75000

2. Display all employees who do not get any commission.

SELECT EmployeeId, Lname, Fname, Salary

FROM employee WHERE Commission IS NULL;

Output

EMPLOYEEID LNAME FNAME SALARY

---------- -------------------- -------------------- ----------

111 Brown Chris 60000

333 Taylor Jordan 45000

555 Lopez Sophia 75000

3. Display unique building names from LOCATION table.

SELECT DISTINCT Building FROM location;

Output

BUILDING

------------------------------

Engineering Building

Science Building

Electrical Building

Chemistry Building

Computer Science Building

4. Display all course sections offered in Winter 2020.

SELECT CsId, CourseId, Section, TermId FROM crossection

WHERE TermId = (SELECT TermId FROM term WHERE TermDesc = 'Winter 2020');

Output

CSID COURSEID SECTION TERMID

---------- ---------- -------------------- ----------

1 1 A 1

5. Display names of faculty members who work in department 1 or 2.

SELECT Name FROM faculty WHERE DeptId IN (1, 2);

Output

NAME

--------------------------------------------------

Dr. John Smith

Dr. Sarah Johnson

6. Find all New York and New Jersey students.

SELECT StudentId, Last, First, City, State FROM student WHERE State IN ('NY', 'NJ');

Output

STUDENTID LAST FIRST CITY STATE

---------- -------------------- -------------------- -------------------- --------------------

1 Doe Jane New York NY

2 Smith Michael Newark NJ

3 Williams Sophia Albany NY

4 Johnson Emma Trenton NJ

7. Give a 10% raise to employee number 111.

UPDATE employee SET Salary = Salary \* 1.10 WHERE EmployeeId = 111;

Output

1 row updated.

8. Delete department number 30 from the department table.

DELETE FROM department WHERE DeptId = 30;

Output

0 rows deleted.

9. For each course ID, display the maximum count in descending order.

SELECT CourseId, MAX(MaxCount) AS "Maximum Count" FROM crossection

GROUP BY CourseId ORDER BY MAX(MaxCount) DESC;

Output

COURSEID Maximum Count

---------- -------------

5 100

4 35

1 30

2 25

3 20

10. Insert a new term in the TERM table.

INSERT INTO term (TermId, TermDesc, StartDate, EndDate)

VALUES (6, 'Winter 2025', TO\_DATE('2025-01-05', 'YYYY-MM-DD'), TO\_DATE('2025-04-25', 'YYYY-MM-DD'));

Output

1 row created.

11. Find courses with no required prerequisite.

SELECT CourseId, Title FROM course WHERE PreReq IS NULL;

Output

COURSEID TITLE

---------- --------------------

1 Database Systems

12. Find faculty members whose names start with C.

SELECT FacultyId, Name FROM faculty WHERE Name LIKE 'C%';

Output

no rows selected

13. Find students who started in the year 2015. Use StartTerm column and wild card.

SELECT StudentId, Last, First, StartTerm FROM student

WHERE TO\_CHAR(StartTerm, 'YYYY') LIKE '2015%';

Output

STUDENTID LAST FIRST STARTTERM

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1 Doe Jane 01-SEP-15

2 Smith Michael 01-SEP-15

3 Williams Sophia 10-JAN-15