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
---------- -------------------- -------------------- ---------
         1 Doe                  Jane                 01-SEP-15
         2 Smith                Michael              01-SEP-15
         3 Williams             Sophia               10-JAN-15
```