Module: Mastering the SQL SELECT Command

Objectives:
By the end of this module, students will be able to:
- Understand the purpose of the SELECT command
- Use various clauses and options with SELECT

1. **Basic SELECT**

    SELECT column1, column2 FROM table_name;

2. **SELECT with LIKE**
    a. The LIKE operator is used in a WHERE clause to search for a specified pattern in a column.
    - Find firstname starting with 'P'
      SELECT firstname FROM tbl_employees WHERE firstname LIKE 'P%';
    - Find lastname ending in 'off
      SELECT lastname FROM tbl_employees WHERE lastname LIKE '%off';
    - Find firstname containing 'te'
      SELECT firstname FROM tbl_employees WHERE firstname LIKE '%te%';
    - Find firstname where second letter is 'a'
      SELECT firstname FROM tbl_employees WHERE firstname LIKE '_te%';

3. **SELECT DISTINCT**
    a. Removes duplicate

    SELECT DISTINCT department_id FROM tbl_employees;

4. **SELECT with WHERE Clause**
    a. Filters records based on a condition.

    SELECT * FROM tbl_employees WHERE salary > 50000.00;

5. **SELECT with ORDER BY**
    a. Sorts records ascending (ASC) or descending (DESC).

    SELECT firstname,lastname, salary FROM tbl_employees ORDER BY salary DESC;

6. **SELECT with GROUP BY**
    a. Groups rows with the same values.

    SELECT position_id, COUNT(*) AS total FROM tbl_employees GROUP BY position_id;

7. **SELECT with HAVING**
   a. Filters grouped results.

SELECT position_id, COUNT(*) AS total FROM tbl_employees GROUP BY position_id HAVING COUNT(*) > 1;

8. **SELECT with LIMIT / TOP**
   a. Limits number of records.

SELECT * FROM tbl_employees LIMIT 2;

Or

SELECT TOP 2 * FROM tbl_employees;

9. **SELECT with OFFSET**
   a. SELECT with OFFSET

SELECT * FROM students LIMIT 3 OFFSET 2;