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 'te'
     SELECT firstname FROM tbl_employees WHERE firstname LIKE '_te%';

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

   SELECT DISTINCT position_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**
    a. Limits number of records.

    SELECT * FROM tbl_employees LIMIT 2;

9. **SELECT with OFFSET**
    a. SELECT with OFFSET
    SELECT * FROM tbl_employees LIMIT 3 OFFSET 2;

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+----+-----------+-----------+-------------+--------+-----------+------------+---------+
| id | firstname | lastname  | position_id | gender | salary    | date_hired | status  |
+----+-----------+-----------+-------------+--------+-----------+------------+---------+
|  1 | Jerwin    | Cruz      |           1 | M      |  60000.00 | 2018-06-30 | ACTIVE  |
|  2 | Peter     | Parker    |           2 | M      |  65000.00 | 2011-12-02 | ACTIVE  |
|  3 | Tony      | Stark     |           2 | M      | 102000.00 | 2002-02-01 | ACTIVE  |
|  4 | Natasha   | Romanoff  |           4 | F      |  70000.00 | 2015-10-24 | ACTIVE  |
|  5 | Wanda     | Maximoff  |           3 | F      |  48000.00 | 2016-09-25 | ACTIVE  |
|  6 | Steve     | Rogers    |           1 | M      |  58000.00 | 2017-07-25 | ACTIVE  |
|  7 | Stephen   | Strange   |           5 | M      |  52000.00 | 2013-08-25 | ACTIVE  |
+----+-----------+-----------+-------------+--------+-----------+------------+---------+
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MariaDB [db_company]> select * from tbl_positions;

```
+----+------------------+---------------+--------+
| id | position_name    | department_id | status |
+----+------------------+---------------+--------+
|  1 | Junior Developer |             1 | ACTIVE |
|  2 | Senior Developer |             1 | ACTIVE |
|  3 | Junior QA        |             2 | ACTIVE |
|  4 | Senior QA        |             2 | ACTIVE |
|  5 | Technical Manager|             3 | ACTIVE |
+----+------------------+---------------+--------+
```

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+----+-----------------+--------+
| id | department_name | status |
+----+-----------------+--------+
|  1 | Dev Ops         | ACTIVE |
|  2 | QA              | ACTIVE |
|  3 | Managerial      | ACTIVE |
+----+-----------------+--------+
```