**Lab Exercise- Creating and Using Stored Procedures in AWS Redshift**

In AWS Redshift, stored procedures are created and managed using PL/pgSQL, which is a procedural language supported by Redshift for creating complex logic. The SQL commands used to create, call, and manage stored procedures involve standard SQL commands along with PL/pgSQL constructs for procedural logic.

Here’s a detailed lab exercise using SQL and PL/pgSQL to work with stored procedures in Redshift:

**Objective:**

To learn how to create, use, and manage stored procedures in AWS Redshift using SQL and PL/pgSQL.

**Task 1: Create a Basic Stored Procedure**

**Step 1.1: Create a Procedure to Insert Employee Data**

Create the Stored Procedure

Create a stored procedure that inserts a new record into the employees table:

CREATE OR REPLACE PROCEDURE insert\_employee(

emp\_id INTEGER,

emp\_name VARCHAR,

emp\_position VARCHAR,

emp\_salary NUMERIC,

emp\_hire\_date DATE,

emp\_department VARCHAR

)

AS $$

BEGIN

INSERT INTO employees (employee\_id, name, position, salary, hire\_date, department)

VALUES (emp\_id, emp\_name, emp\_position, emp\_salary, emp\_hire\_date, emp\_department);

END;

$$ LANGUAGE plpgsql;

Explanation:

CREATE OR REPLACE PROCEDURE: Defines or replaces a stored procedure with the specified name.

Parameters: Define the parameters the procedure will accept.

BEGIN...END: Contains the procedural logic.

INSERT INTO employees: Executes the SQL insert operation.

**Call the Stored Procedure**

To insert a new employee:

CALL insert\_employee(

6,

'Emily Clark',

'Product Manager',

72000.00,

'2024-08-01',

'Product'

);