**CODTECH IT SOLUTIONS INTERNSHIP**

**Task 3 : DATABASE MIGRATION**

**1.Overview**

This project simulates data migration from MySQL to PostgreSQL using SQL Server Management Studio (SSMS). one database as the source (MySQL) and another as the target (PostgreSQL). The goal is to ensure successful data migration with integrity checks.

**2.Create Database and Tables**

-- Simulated Source DB (MySQL)

CREATE DATABASE Source DB;

Go

USE Source DB;

CREATE TABLE Customers (

Customer ID INT PRIMARY KEY,

Name VARCHAR(100),

Email VARCHAR(100) );

INSERT INTO Customers VALUES (1, 'Alice', 'alice@mail.com'), (2, 'Bob', 'bob@mail.com')

-- Simulated Target DB (PostgreSQL)

CREATE DATABASE Target DB;

GO

USE Target DB;

CREATE TABLE Customers (

Customer ID INT PRIMARY KEY, Name VARCHAR(100), Email VARCHAR(100) );

**3.Migration Script**

-- Step 1: Read from Source

USE Source DB;

SELECT \* INTO Temp Migration Table FROM Customers;

-- Step 2: Insert into Target

USE Target DB;

INSERT INTO Customers (Customer ID, Name, Email)

SELECT Customer ID, Name, Email FROM Source DB. dbo. Customers;

**4.Data Integrity Check**

-- Count match validation

SELECT COUNT(\*) AS Source Count FROM SourceDB. dbo.Customers;

SELECT COUNT(\*) AS Target Count FROM TargetDB. dbo.Customers;-

Data value comparison

SELECT \* FROM Source DB .dbo. Customers

EXCEPT

SELECT \* FROM Target DB .dbo. Customers;

**5.Summary Report**

- Two databases were simulated in SSMS: SourceDB and TargetDB.-

Data from Customers table was copied from SourceDB to TargetDB.-

COUNT and EXCEPT queries were used to ensure data consistency.-

This is a safe way to simulate MySQL to PostgreSQL migration using SQL Server Management Studio.