# CODTECH Internship Task 3: Database Migration

This report outlines the process and scripts used to migrate data from a MySQL database to a PostgreSQL database, ensuring data integrity and consistency during the migration process.

## Migration Steps

* 1. Export data from MySQL using the `mysqldump` utility.
* 2. Modify the dump file to be compatible with PostgreSQL (if required).
* 3. Create a new database in PostgreSQL.
* 4. Import the modified dump file into the PostgreSQL database using `psql`.
* 5. Verify data integrity by comparing row counts and performing spot checks.

## Example Scripts

* \*\*MySQL Export Script:\*\*

```bash  
mysqldump -u <username> -p<password> --compatible=postgresql --default-character-set=utf8 <database\_name> > mysql\_dump.sql  
```

* \*\*PostgreSQL Import Script:\*\*

```bash  
psql -U <username> -d <new\_database> -f mysql\_dump.sql  
```

## Data Integrity Verification

After migration, perform data integrity checks to ensure that all tables and rows are successfully migrated. This can include:

* 1. Compare the row counts in each table.
* 2. Perform spot checks on key tables to verify data correctness.
* 3. Run SELECT queries to verify data accuracy.

## Summary

The migration from MySQL to PostgreSQL involves exporting the data, modifying the dump file if needed, and importing it into the new database. Proper integrity checks are performed to ensure successful migration.