<u>**Oracle Pluggable Database (PDB) Assignment Report**</u>

1. Overview of Tasks

This assignment involved working with Oracle Pluggable Databases (PDBs) and Oracle Enterprise Manager (OEM). The objectives were:

1. **Task 1:** Create a new PDB named plsql_class2025db with a user account following the format FirstName_plsqlauca_StudentID. This PDB is intended for storing class exercises.
2. **Task 2:** Create another PDB to demonstrate creation and deletion operations. The format was FirstTwoLettersOfName_to_delete_pdb_StudentID. After creating it, the PDB was deleted.
3. **Task 3:** Configure Oracle Enterprise Manager and provide a screenshot of the dashboard showing the created PDBs.

2. Task Execution

Task 1: Create a New PDB

- **PDB Name:** plsql_class2025db
- **Username:** [YourFirstName]_plsqlauca_[StudentID]
- **Password:** [YourChosenPassword]

Steps Taken:

1. Logged in to the Oracle Container Database (CDB) as a privileged user.
2. Executed SQL commands to create the PDB and user.
3. Granted necessary privileges to the user.
4. Verified the PDB creation by connecting to it.

Screenshot:

```
db_create_file_dest                    string
SQL> SELECT name FROM v$datafile;

NAME
------------------------------------------------------------------
C:\USERS\HP\DESKTOP\ORADATA\ORCL\SYSTEM01.DBF
C:\USERS\HP\DESKTOP\ORADATA\ORCL\SYSAUX01.DBF
C:\USERS\HP\DESKTOP\ORADATA\ORCL\UNDOTBS01.DBF
C:\USERS\HP\DESKTOP\ORADATA\ORCL\PDBSEED\SYSTEM01.DBF
C:\USERS\HP\DESKTOP\ORADATA\ORCL\PDBSEED\SYSAUX01.DBF
C:\USERS\HP\DESKTOP\ORADATA\ORCL\USERS01.DBF
C:\USERS\HP\DESKTOP\ORADATA\ORCL\PDBSEED\UNDOTBS01.DBF
C:\USERS\HP\DESKTOP\ORADATA\ORCL\ORCLPDB\SYSTEM01.DBF
C:\USERS\HP\DESKTOP\ORADATA\ORCL\ORCLPDB\SYSAUX01.DBF
C:\USERS\HP\DESKTOP\ORADATA\ORCL\ORCLPDB\UNDOTBS01.DBF
C:\USERS\HP\DESKTOP\ORADATA\ORCL\ORCLPDB\USERS01.DBF

11 rows selected.

SQL> CREATE PLUGGABLE DATABASE plsql_class2025db
  2  ADMIN USER denis_plsqlauca_26941 IDENTIFIED BY "Dennis@1234"
  3  FILE_NAME_CONVERT = (
  4    'C:\USERS\HP\DESKTOP\ORADATA\ORCL\PDBSEED\',
  5    'C:\USERS\HP\DESKTOP\ORADATA\ORCL\PLSQL_CLASS2025DB\'
  6  );

Pluggable database created.

SQL> ALTER PLUGGABLE DATABASE plsql_class2025db OPEN;

Pluggable database altered.

SQL> ALTER PLUGGABLE DATABASE plsql_class2025db SAVE STATE;

Pluggable database altered.

SQL> SHOW PDBS;

    CON_ID CON_NAME                        OPEN MODE  RESTRICTED
---------- ------------------------------ ---------- ----------
         2 PDB$SEED                        READ ONLY  NO
         3 ORCLPDB                         READ WRITE NO
         5 PLSQL_CLASS2025DB               READ WRITE NO
SQL>
```

```
Pluggable database created.

SQL> ALTER PLUGGABLE DATABASE plsql_class2025db OPEN;

Pluggable database altered.

SQL> ALTER PLUGGABLE DATABASE plsql_class2025db SAVE STATE;

Pluggable database altered.

SQL> SHOW PDBS;

    CON_ID CON_NAME                        OPEN MODE  RESTRICTED
---------- ------------------------------ ---------- ----------
         2 PDB$SEED                        READ ONLY  NO
         3 ORCLPDB                         READ WRITE NO
         5 PLSQL_CLASS2025DB               READ WRITE NO
SQL> CREATE PLUGGABLE DATABASE de_to_delete_pdb_26941
  2  ADMIN USER de_admin IDENTIFIED BY "Dennis@1234"
  3  FILE_NAME_CONVERT = (
  4    'C:\USERS\HP\DESKTOP\ORADATA\ORCL\PDBSEED\',
  5    'C:\USERS\HP\DESKTOP\ORADATA\ORCL\de_to_delete_pdb_26941\'
  6  );

Pluggable database created.

SQL> ALTER PLUGGABLE DATABASE de_to_delete_pdb_26941 OPEN;

Pluggable database altered.

SQL>
SQL>
```

Task 2: Create and Delete a PDB

- **PDB Name:** [FirstTwoLettersOfName]_to_delete_pdb_[StudentID]

Steps Taken:

1. Created the PDB using SQL commands.
2. Verified creation by listing all PDBs.
3. Deleted the PDB after verification.
4. Confirmed deletion to ensure the database was removed.

Screenshots:

- PDB Creation:

```
Pluggable database created.

SQL> ALTER PLUGGABLE DATABASE plsql_class2025db OPEN;

Pluggable database altered.

SQL> ALTER PLUGGABLE DATABASE plsql_class2025db SAVE STATE;

Pluggable database altered.

SQL> SHOW PDBS;

    CON_ID CON_NAME                         OPEN MODE  RESTRICTED
---------- ------------------------------ ---------- ----------
         2 PDB$SEED                         READ ONLY  NO
         3 ORCLPDB                          READ WRITE NO
         5 PLSQL_CLASS2025DB                READ WRITE NO
SQL> CREATE PLUGGABLE DATABASE de_to_delete_pdb_26941
  2  ADMIN USER de_admin IDENTIFIED BY "Dennis@1234"
  3  FILE_NAME_CONVERT = (
  4    'C:\USERS\HP\DESKTOP\ORADATA\ORCL\PDBSEED\',
  5    'C:\USERS\HP\DESKTOP\ORADATA\ORCL\de_to_delete_pdb_26941\'
  6  );

Pluggable database created.

SQL> ALTER PLUGGABLE DATABASE de_to_delete_pdb_26941 OPEN;

Pluggable database altered.

SQL>
SQL>
```

PDB Deletion:

```
Pluggable database created.

SQL> ALTER PLUGGABLE DATABASE de_to_delete_pdb_26941 OPEN;

Pluggable database altered.

SQL>
SQL> ALTER PLUGGABLE DATABASE de_to_delete_pdb_26941 CLOSE IMMEDIATE;

Pluggable database altered.

SQL>
SQL> SHOW PDBS;

    CON_ID CON_NAME                        OPEN MODE  RESTRICTED
---------- ------------------------------ ---------- ----------
         2 PDB$SEED                        READ ONLY  NO
         3 ORCLPDB                         READ WRITE NO
         4 DE_TO_DELETE_PDB_26941          MOUNTED
         5 PLSQL_CLASS2025DB               READ WRITE NO
SQL> ALTER PLUGGABLE DATABASE de_to_delete_pdb_26941 CLOSE IMMEDIATE;
ALTER PLUGGABLE DATABASE de_to_delete_pdb_26941 CLOSE IMMEDIATE
*
ERROR at line 1:
ORA-65020: pluggable database DE_TO_DELETE_PDB_26941 already closed


SQL>
SQL> DROP PLUGGABLE DATABASE de_to_delete_pdb_26941 INCLUDING DATAFILES;

Pluggable database dropped.

SQL>
SQL> SHOW PDBS;

    CON_ID CON_NAME                        OPEN MODE  RESTRICTED
---------- ------------------------------ ---------- ----------
         2 PDB$SEED                        READ ONLY  NO
         3 ORCLPDB                         READ WRITE NO
         5 PLSQL_CLASS2025DB               READ WRITE NO
SQL>
```
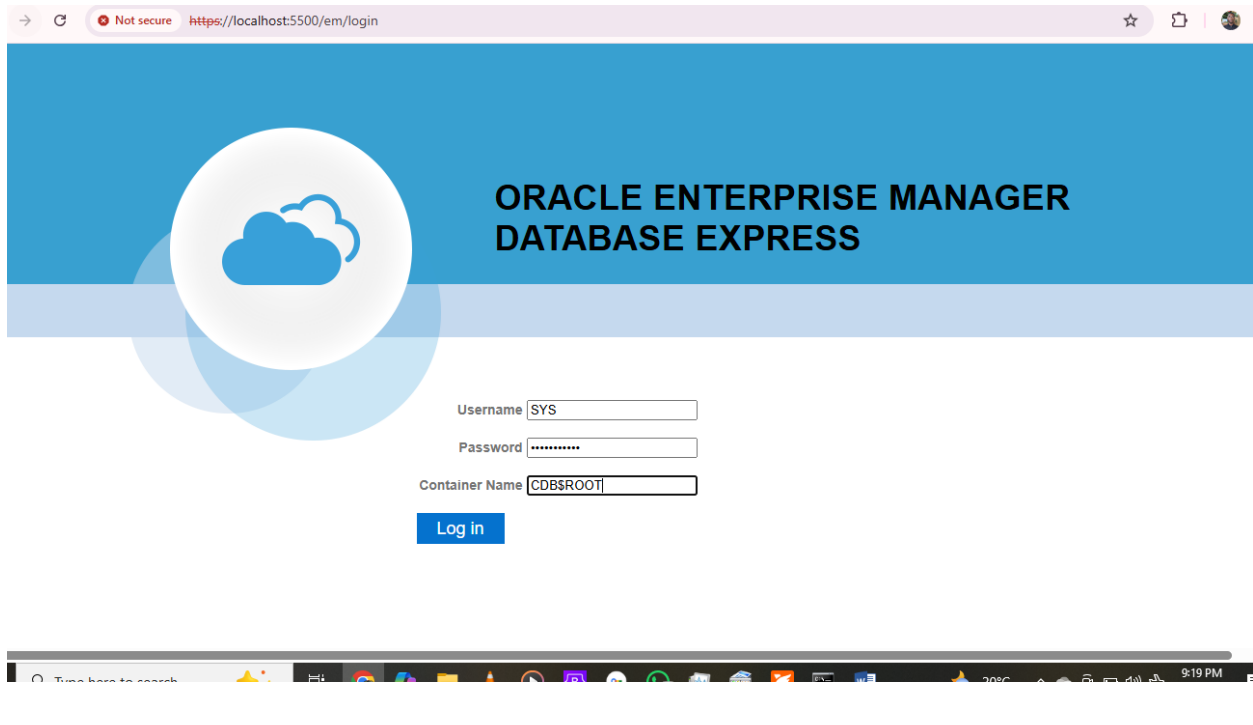
Task 3: Oracle Enterprise Manager (OEM)

Steps Taken:

1. Accessed Oracle Enterprise Manager.
2. Configured the dashboard to display all PDBs under the container database.
3. Verified that plsql_class2025db is active and accessible.

Screenshot:

3. Issues and Notes

- **Issue:** None significant.
- **Resolution:** N/A
- **Observation:** The creation and deletion of PDBs are straightforward when executed with correct privileges. OEM provides a user-friendly interface for monitoring PDBs.

End of Report