



IE2080

Database Systems Administration

2nd Year 1st Semester

Assignment

Submitted to
Sri Lanka Institute of Information Technology

BSc (Hons) in Information Technology - Computer Systems & Network
Engineering

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05th December 2023

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B) Create a PDB by using Database Configuration Assistant

1. Log in to Oracle server using sqlplus and Check the PDB

```
Command Prompt - sqlplus / as sysdba
Microsoft Windows [Version 10.0.19045.2965]
(c) Microsoft Corporation. All rights reserved.

C:\Users\DSA_IT22339188>sqlplus / as sysdba

SQL*Plus: Release 12.1.0.2.0 Production on Sun Dec 3 21:18:15 2023

Copyright (c) 1982, 2014, Oracle. All rights reserved.

Connected to:
Oracle Database 12c Enterprise Edition Release 12.1.0.2.0 - 64bit Production
With the Partitioning, OLAP, Advanced Analytics and Real Application Testing options

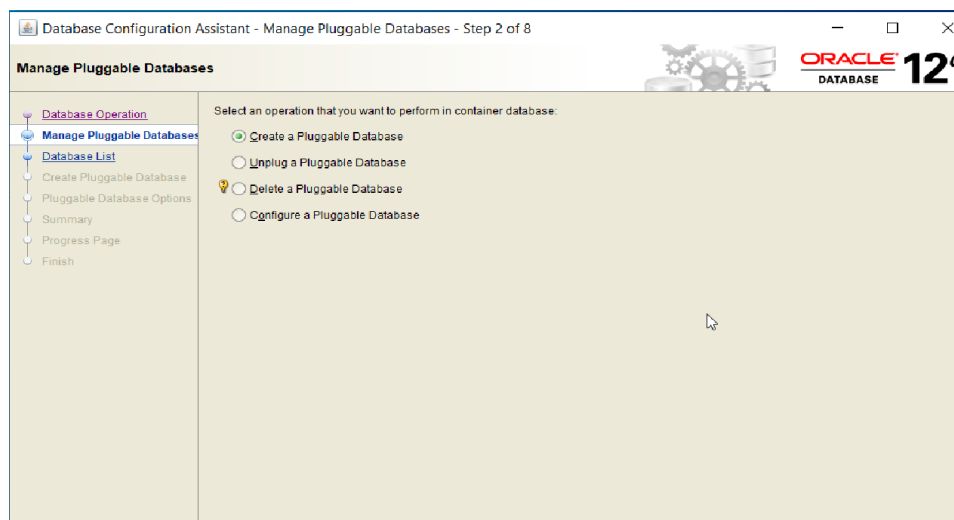
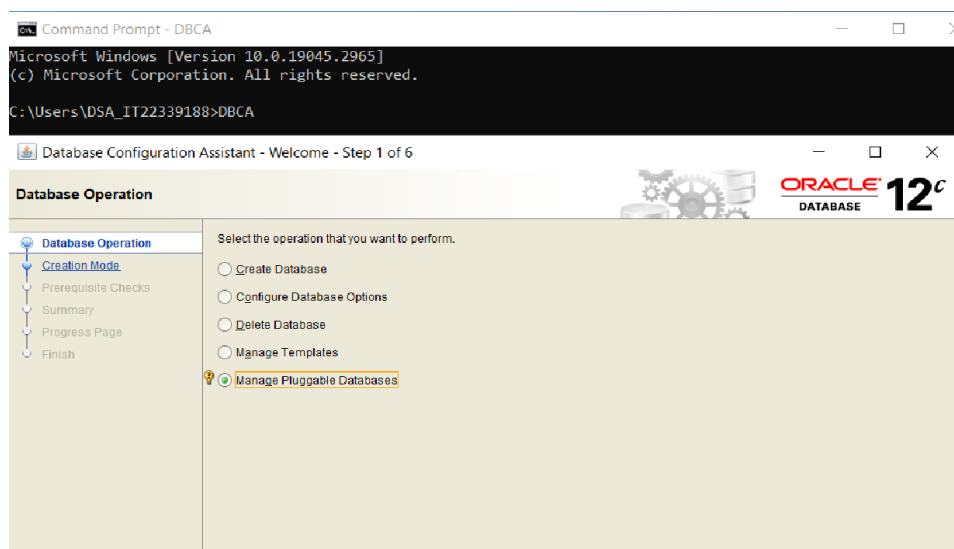
SQL> select name,open_mode,cdb from v$database;

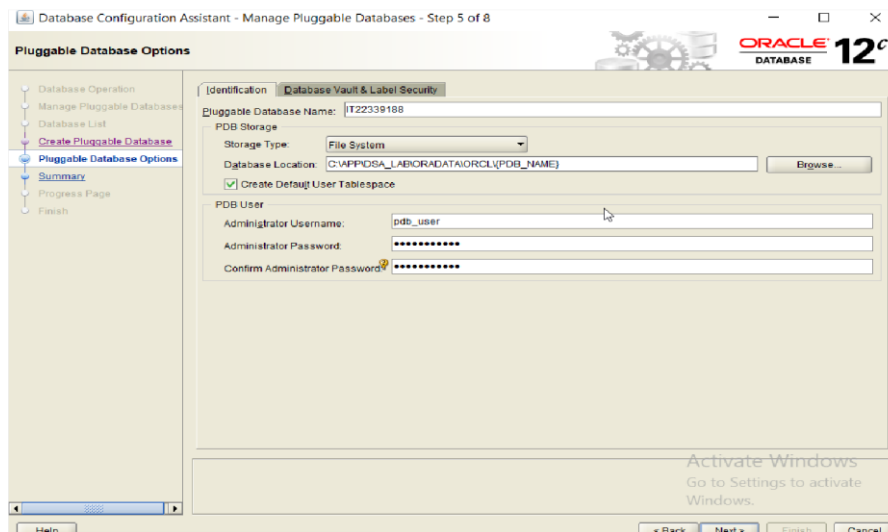
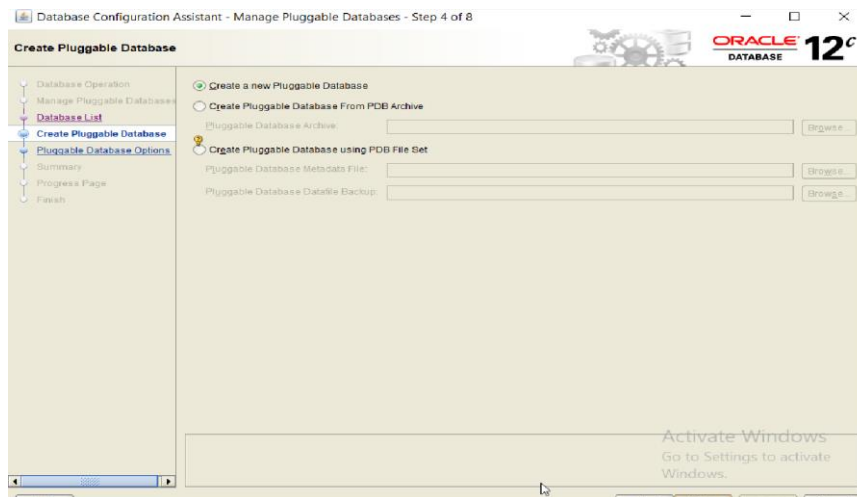
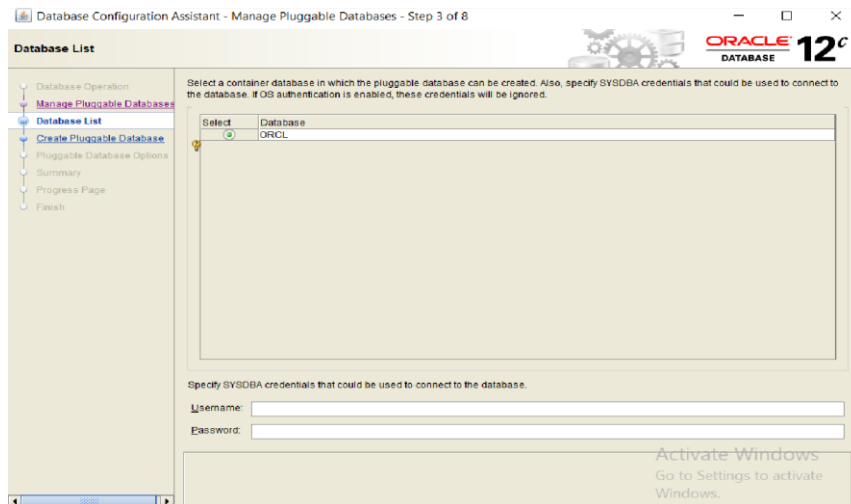
NAME          OPEN_MODE    CDB
-----
ORCL          READ WRITE   YES

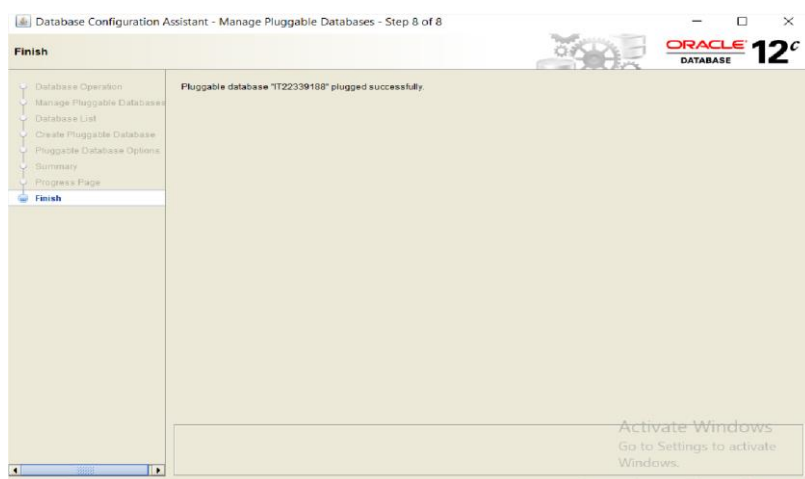
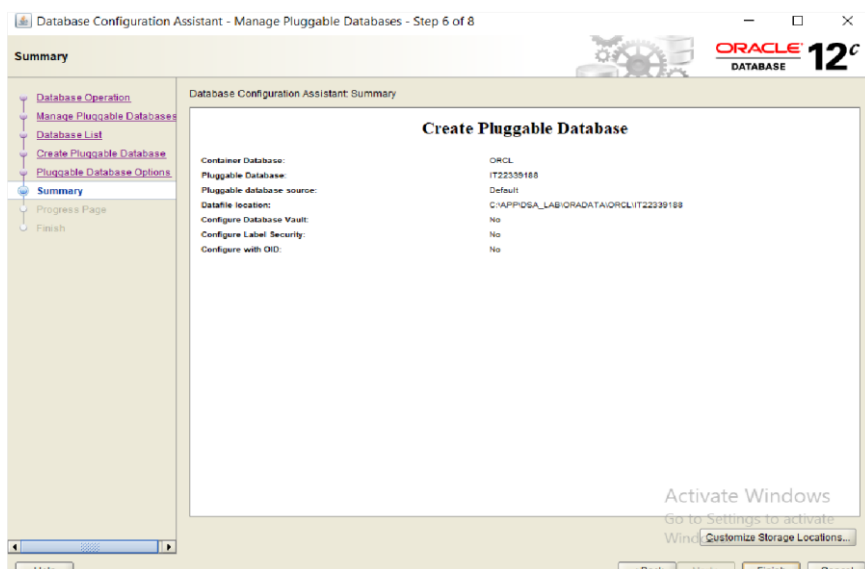
SQL> show pdbs

  CON_ID CON_NAME              OPEN MODE RESTRICTED
-----
      2 PDB$SEED              READ ONLY   NO
      3 PDBORCL              READ WRITE  NO
```

2. Run DBCA utility provided by Oracle to create a new pluggable database







```

C:\Users\DSA_IT22339188>sqlplus / as sysdba

Microsoft Windows [Version 10.0.19045.2965]
(c) Microsoft Corporation. All rights reserved.

C:\Users\DSA_IT22339188>DBCA

C:\Users\DSA_IT22339188>sqlplus / as sysdba

SQL*Plus: Release 12.1.0.2.0 Production on Sun Dec 3 21:34:17 2023

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Connected to:
Oracle Database 12c Enterprise Edition Release 12.1.0.2.0 - 64bit Production
With the Partitioning, OLAP, Advanced Analytics and Real Application Testing options

SQL> show pdbs

  CON_ID CON_NAME              OPEN MODE  RESTRICTED
  -----
2 PDB$SEED                   READ ONLY  NO
3 PDBORCL                    READ WRITE NO
4 IT22339188                  READ WRITE NO

SQL>

```

C) Provide user administration and security

1) Create Profile

```
Command Prompt - sqlplus / as sysdba

SQL> Alter session set container = IT22339188;

Session altered.

SQL> create profile Accountant limit
  2 SESSIONS_PER_USER UNLIMITED
  3 CPU_PER_SESSION UNLIMITED
  4 CPU_PER_CALL 3000
  5 CONNECT_TIME 40
  6 LOGICAL_READS_PER_SESSION DEFAULT
  7 LOGICAL_READS_PER_CALL 1000
  8 PRIVATE_SGA 25K
  9 COMPOSITE_LIMIT 5000000
 10 FAILED_LOGIN_ATTEMPTS 3
 11 PASSWORD_LIFE_TIME 180
 12 PASSWORD_REUSE_TIME 30
 13 PASSWORD_REUSE_MAX 7
 14 PASSWORD_LOCK_TIME 1/24
 15 PASSWORD_GRACE_TIME 7
 16 PASSWORD_VERIFY_FUNCTION NULL
 17 ;

Profile created.
```

2) Create default table space

```
Command Prompt - sqlplus / as sysdba

SQL> CREATE TABLESPACE DamithaTS
  2 DATAFILE 'Damitha_perm.dat'
  3 SIZE 100M
  4 REUSE
  5 AUTOEXTEND ON NEXT 10M MAXSIZE 200M
  6 ;

Tablespace created.

SQL>
```

3) Create temporary table space

```
Command Prompt - sqlplus / as sysdba

SQL> CREATE TEMPORARY TABLESPACE DamithaTEMP
  2 TEMPFILE 'Damitha_temp.dpf'
  3 SIZE 10M
  4 AUTOEXTEND ON
  5 ;

Tablespace created.

SQL>
```

4) Create role

```
SQL> CREATE ROLE Accountant;

Role created.

SQL> GRANT CONNECT,RESOURCE,DBA TO Accountant;

Grant succeeded.

SQL> GRANT CREATE SESSION TO Accountant;

Grant succeeded.

SQL> GRANT CREATE TABLE,CREATE VIEW,CREATE ANY PROCEDURE,CREATE SESSION,CREATE TRIGGER,CREATE SYNONYM TO Accountant;

Grant succeeded.
```

5) Create user

```
Command Prompt - sqlplus / as sysdba

SQL> CREATE USER Damitha IDENTIFIED BY dami123
2  DEFAULT TABLESPACE DamithaTS
3  TEMPORARY TABLESPACE DamithaTEMP
4  QUOTA 50M ON DamithaTS
5  PROFILE Accountant
6  ;

User created.

SQL> GRANT Accountant TO Damitha;

Grant succeeded.
```

6) Connect to user account

```
Command Prompt - sqlplus Damitha/dami123@IT22339188

Microsoft Windows [Version 10.0.19045.2965]
(c) Microsoft Corporation. All rights reserved.

C:\Users\DSA_IT22339188>sqlplus Damitha/dami123@IT22339188

SQL*Plus: Release 12.1.0.2.0 Production on Mon Dec 4 17:15:13 2023

Copyright (c) 1982, 2014, Oracle. All rights reserved.

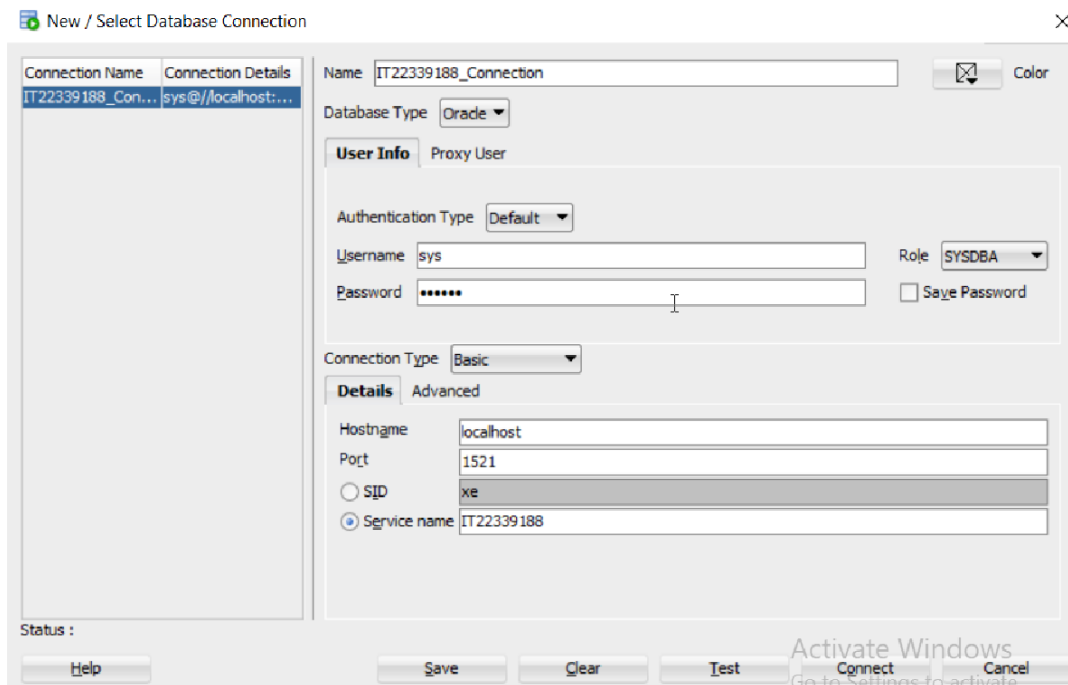
Connected to:
Oracle Database 12c Enterprise Edition Release 12.1.0.2.0 - 64bit Production
With the Partitioning, OLAP, Advanced Analytics and Real Application Testing options

SQL> select user from dual;

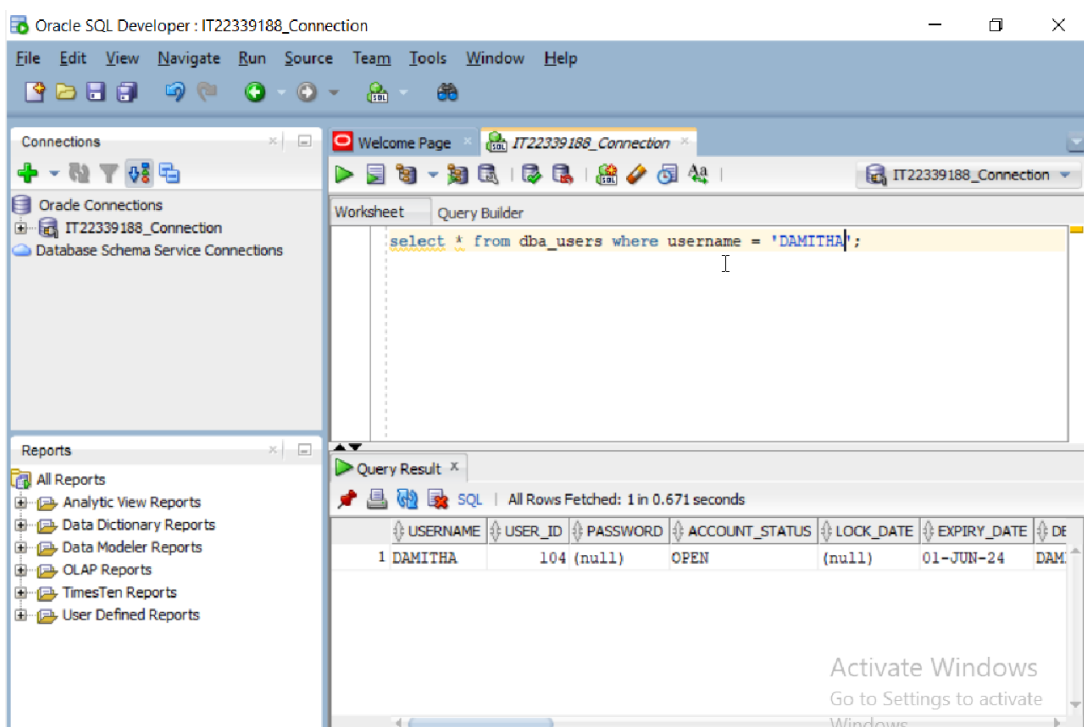
USER
-----
DAMITHA
```

D) Managing Schema Objects

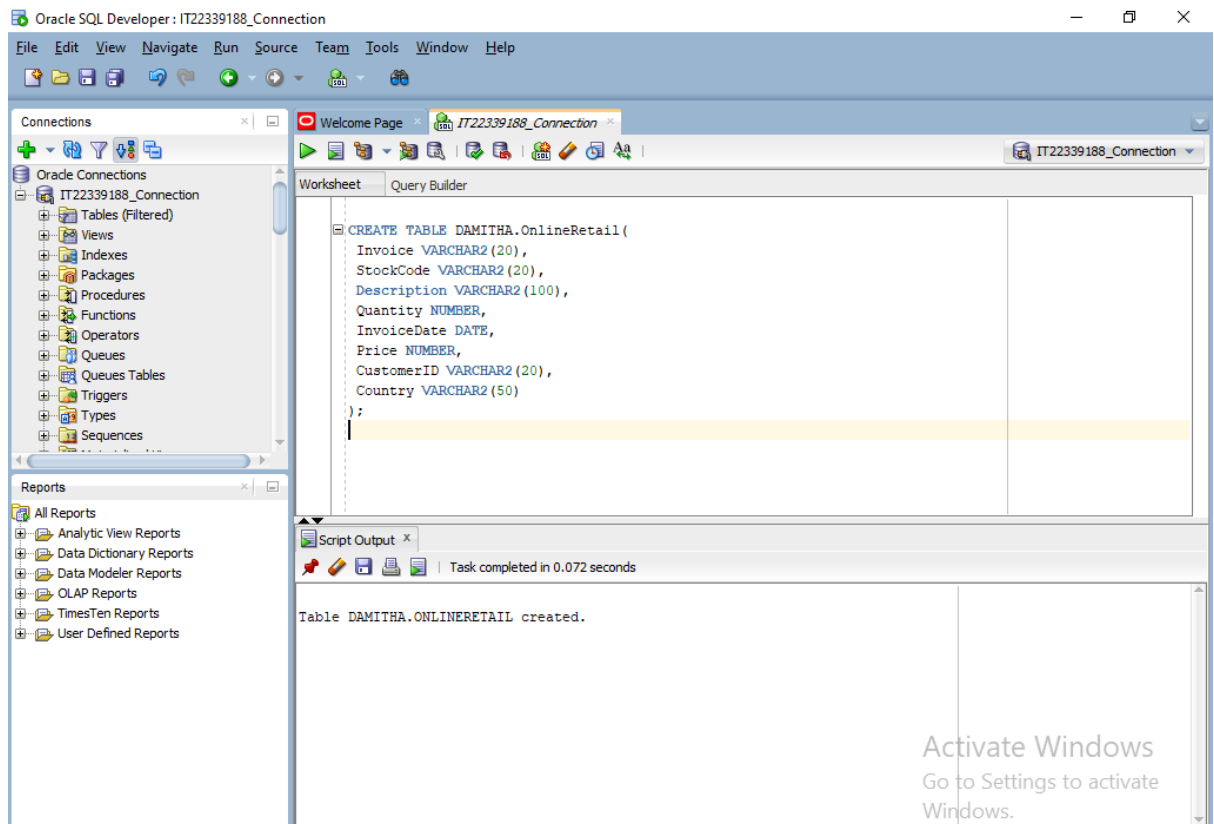
1) Create Database connection in SQL developer



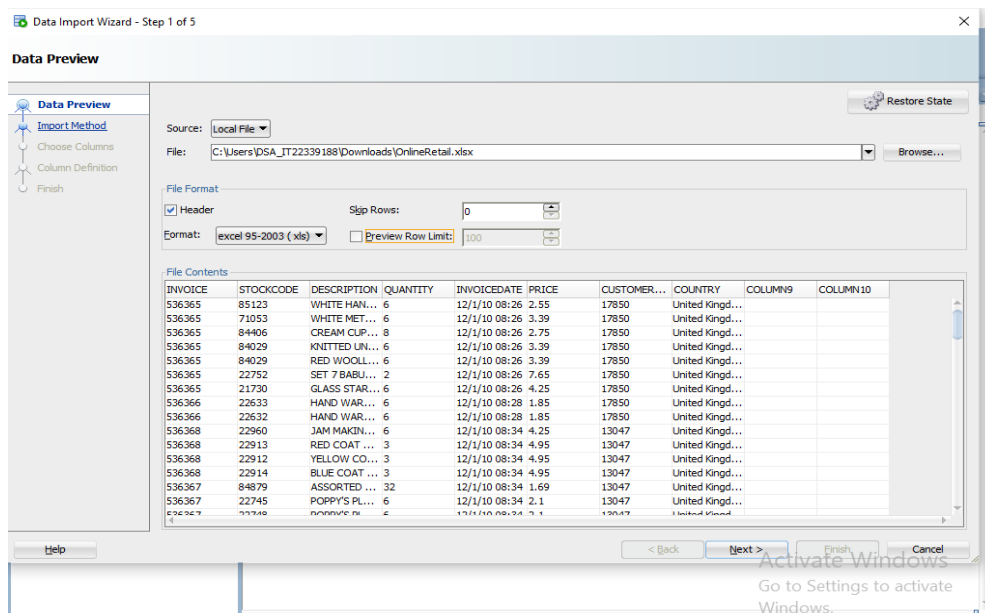
2) Check whether the user created in part C is available in the user's list.



3) Create a new table.



4) Load the OnlineRetail data into the newly created table.



Data Import Wizard - Step 2 of 4

Import Method

Specify the method for importing data. For Staging External Table method, an external table will be created as a staging table for importing the Target Table. For other import methods, data is imported directly into the table.

Import Method:

☐ Send Create Script to SQL Worksheet

Table Name:

☐ Import Row Limit:

File Contents

INVOICE	STOCKCODE	DESCRIPTION	QUANTITY	INVOICEDATE	PRICE	CUSTOMER...	COUNTRY	COLUMN9	COLUMN10
536365	85123	WHITE HAN...	6	12/1/10 08:26	2.55	17850	United Kingd...		
536365	71053	WHITE MET...	6	12/1/10 08:26	3.39	17850	United Kingd...		
536365	84406	CREAM CUP...	8	12/1/10 08:26	2.75	17850	United Kingd...		
536365	84029	KNITTED UN...	6	12/1/10 08:26	3.39	17850	United Kingd...		
536365	84029	RED WOOLL...	6	12/1/10 08:26	3.39	17850	United Kingd...		
536365	22752	SET 7 BABU...	2	12/1/10 08:26	7.65	17850	United Kingd...		
536365	21730	GLASS STAR...	6	12/1/10 08:26	4.25	17850	United Kingd...		
536366	22633	HAND WAR...	6	12/1/10 08:28	1.85	17850	United Kingd...		
536366	22632	HAND WAR...	6	12/1/10 08:28	1.85	17850	United Kingd...		
536368	22960	JAM MAKIN...	6	12/1/10 08:34	4.25	13047	United Kingd...		
536368	22913	RED COAT ...	3	12/1/10 08:34	4.95	13047	United Kingd...		
536368	22912	YELLOW CO...	3	12/1/10 08:34	4.95	13047	United Kingd...		
536368	22914	BLUE COAT ...	3	12/1/10 08:34	4.95	13047	United Kingd...		
536367	84879	ASSORTED ...	32	12/1/10 08:34	1.69	13047	United Kingd...		
536367	22745	POPPY'S PL...	6	12/1/10 08:34	2.1	13047	United Kingd...		
536367	22748	POPPY'S PL...	6	12/1/10 08:34	2.1	13047	United Kingd...		
536367	22749	FELTCRAFT ...	8	12/1/10 08:34	3.75	13047	United Kingd...		

Help < Back Next > Finish Cancel

Activate Windows
Go to Settings to activate Windows.

IT22339188_Connection | DAMITHA | ONLINERETA

Data Import Wizard - Step 3 of 5

Choose Columns

Select the columns to import from the data set and arrange them in the order you want.

Available Columns

- COLUMN9
- COLUMN10

Selected Columns

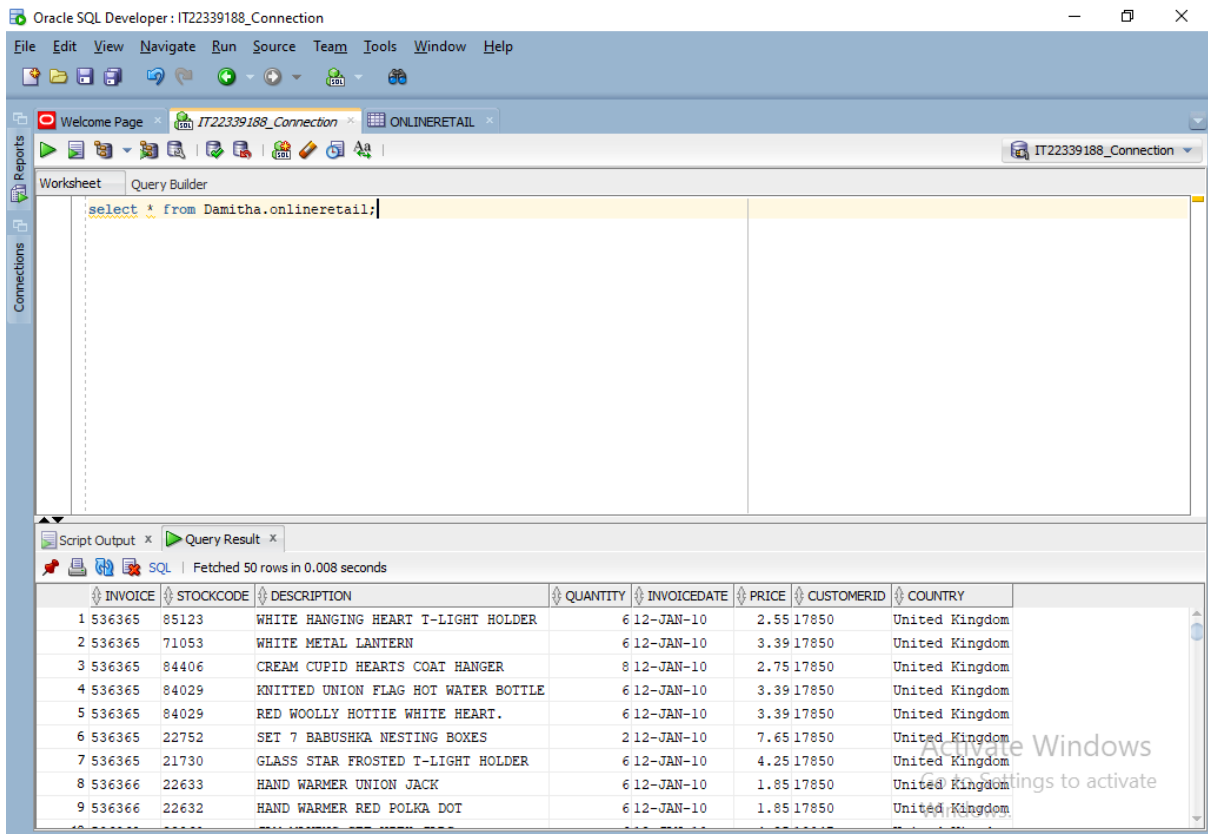
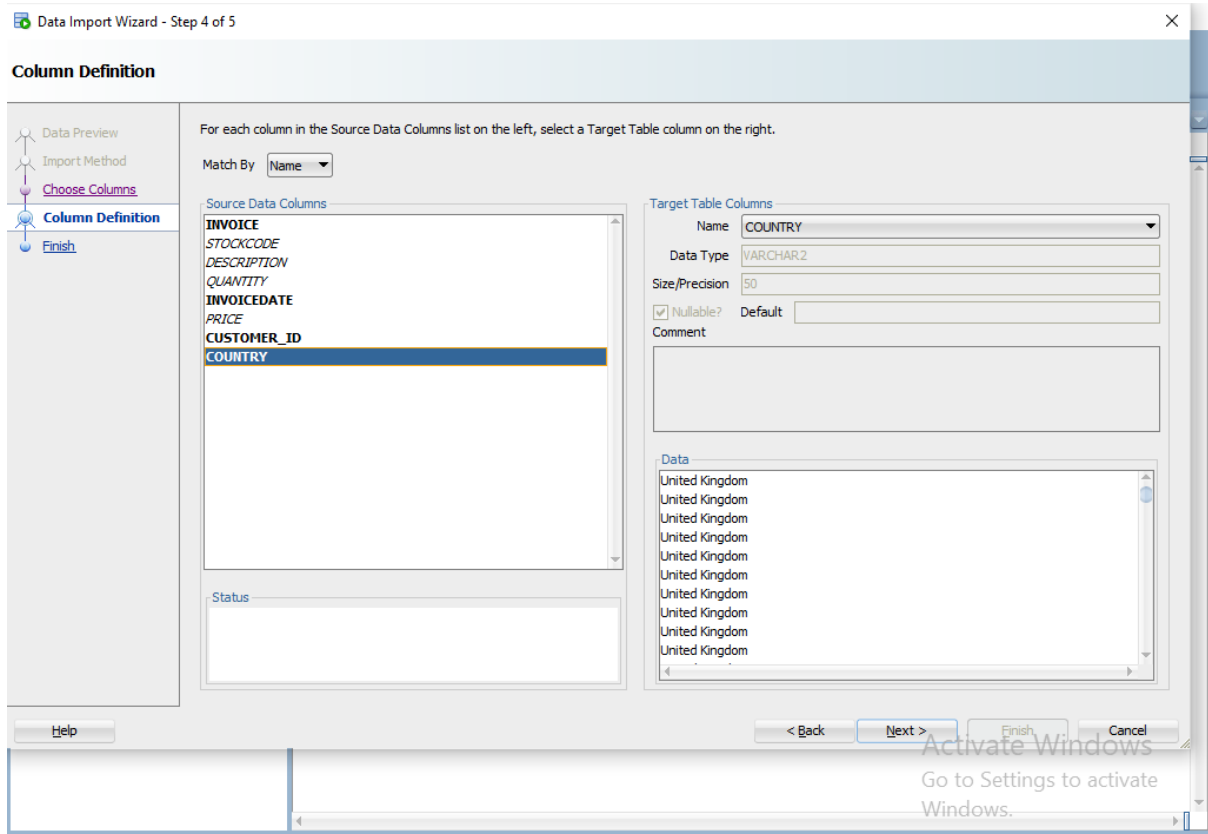
- INVOICE
- STOCKCODE
- DESCRIPTION
- QUANTITY
- INVOICEDATE
- PRICE
- CUSTOMER_ID
- COUNTRY

File Contents

INVOICE	STOCKCODE	DESCRIPTION	QUANTITY	INVOICEDATE	PRICE	CUSTOMER...	COUNTRY	COLUMN9	COLUMN10
536365	85123	WHITE HAN...	6	12/1/10 08:26	2.55	17850	United Kingd...		
536365	71053	WHITE MET...	6	12/1/10 08:26	3.39	17850	United Kingd...		
536365	84406	CREAM CUP...	8	12/1/10 08:26	2.75	17850	United Kingd...		

Help < Back Next > Finish Cancel

Activate Windows
Go to Settings to activate Windows.



5) Create an index.

