SQL Developer is an IDE for working with SQL in Oracle databases. We'll be using SQL Developer to connect to Oracle's cloud database service.

Configuring SQL Developer – JAVA Library

SQL Developer is written and runs on Java, so we need to make following change to SQL Developer config file, to point it to correct Java JDK library.

1. First, we need to find where Java Development Kit is installed on your system.

    Mostly C:\Program Files\Java\jdk1.8.0_101 for 64bit version and C:\Program Files(x86)\Java\jdk1.8.0_101 for 32bit version

    Note down the above path to JDK library

2. Open sqldeveloper config file in Notepad

    ~\sqldeveloper\sqldeveloper\bin\sqldeveloper.conf

3. Find below line in config file

```
1    IncludeConfFile ../../ide/bin/ide.conf
2
3    SetJavaHome ../../jdk
4
```
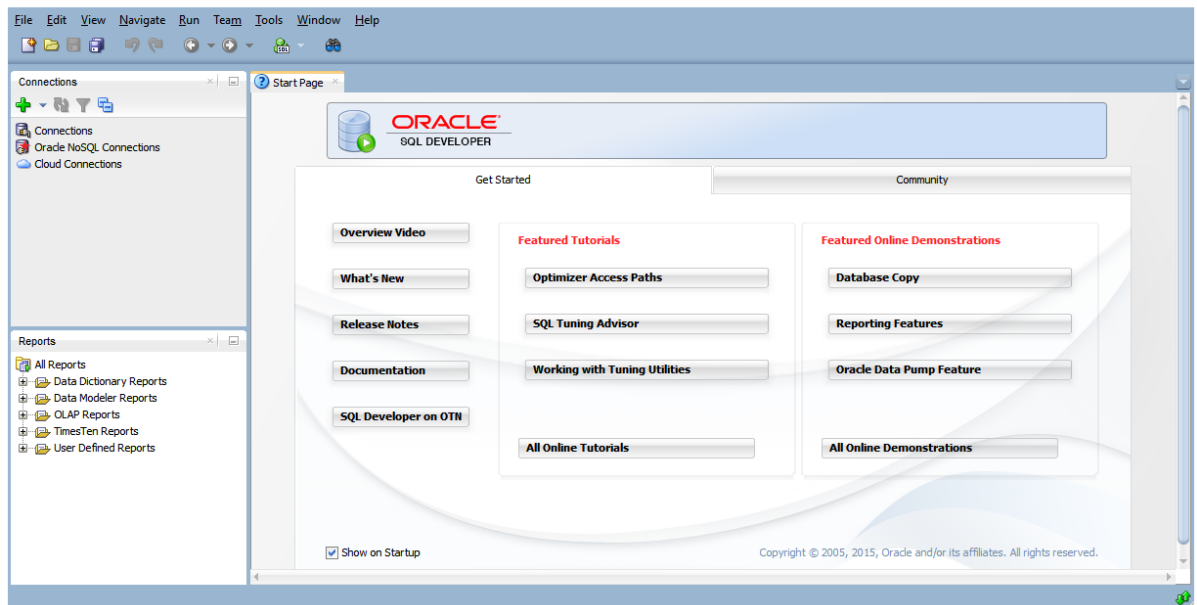
4. Replace "../../jdk" or any other path with the JDK path we noted in STEP 1.

```
1    IncludeConfFile ../../ide/bin/ide.conf
2
3    SetJavaHome C:\Program Files\Java\jdk1.8.0_101
4
```
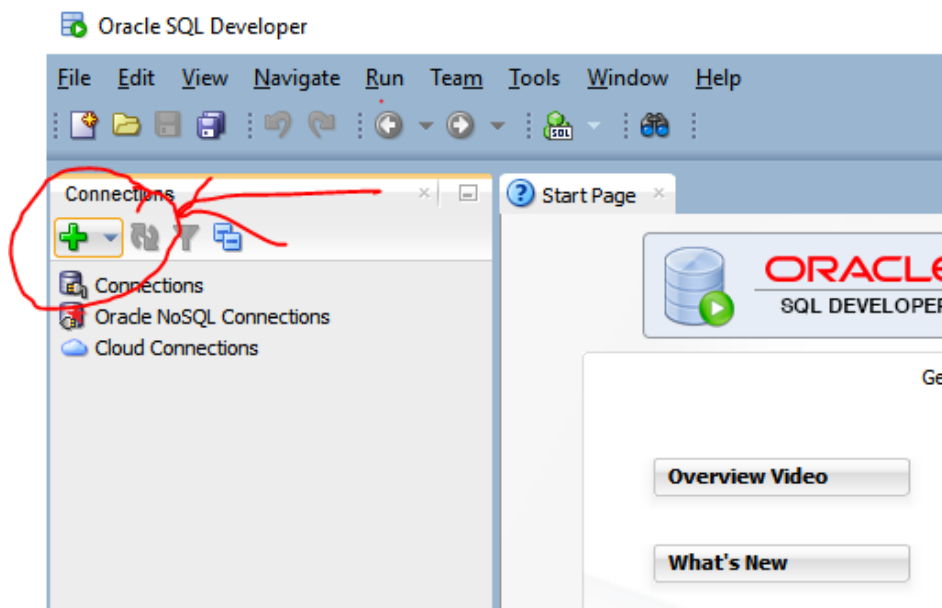
5. Save and close the config file

Connecting to Cloud Database

1. Open sqldeveloper (~\sqldeveloper\sqldeveloper.exe)

2. Click + symbol to create new connection

3. In the New connection window, enter the details as follows –

   Connection Name: connect<your BITS ID>

   Follow this format STRICTLY. Example: connect2016H103022G

UserName: C##DBUSER001_04
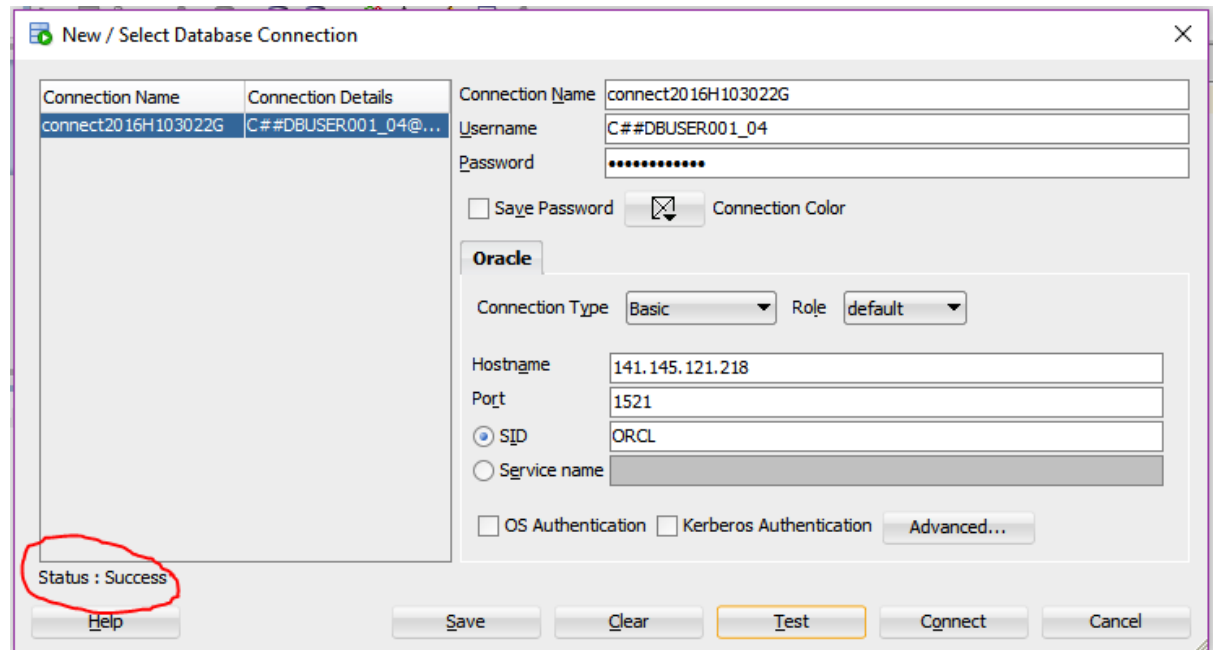Password: DBUSER001_04

Connection Type: Basic
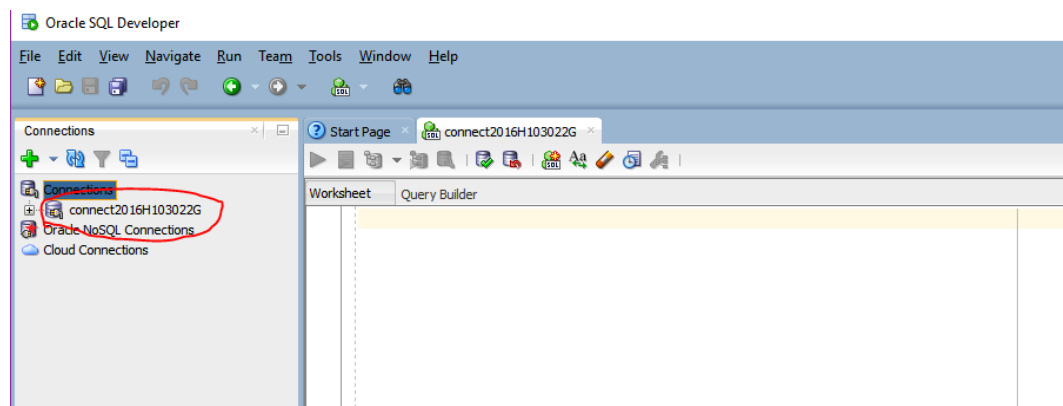Role: Default

Hostname: 141.145.121.218
Port: 1521
SID: ORCL

Click on Test to see if the connection works. It'll show status as success on bottom left corner.
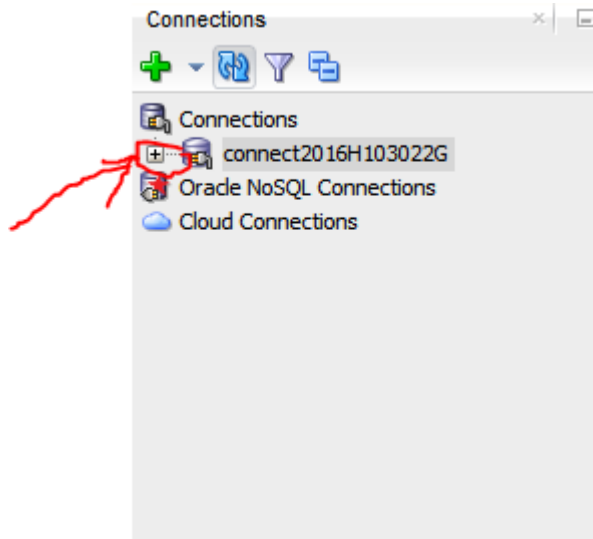
If successful click on 'Connect' to connect to cloud database. Now you're connected to Oracle cloud database service.
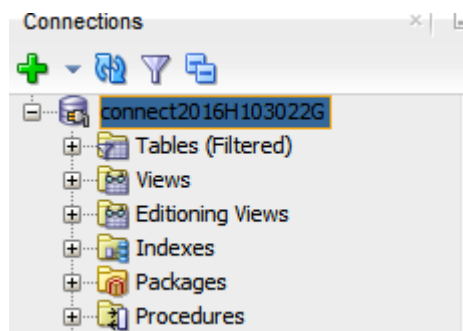

Note: You might get a warning about password expiry, ignore the warning.

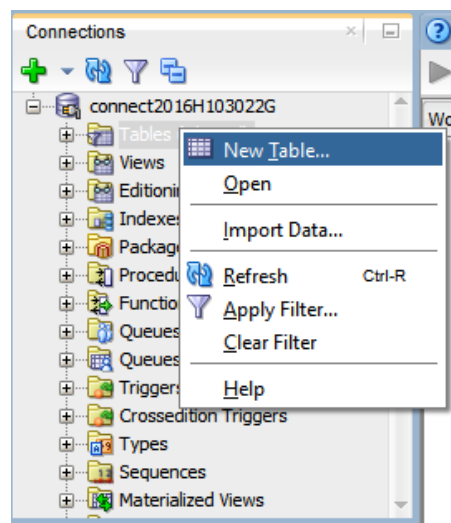# Creating Tables in SQL developer

1. Click expand sign next connect<your id>

2. List of components on database will be displayed

3. Right click on table and select 'New table'

4. Enter the name of table in **BITS_<system no>_TABLENAME** format.

   Example BITS_350_STUDENT

You **MUST** follow the given format while naming the tables. System no is the computer no allocated to you.

Add fields using + symbol and remove the fields using X symbol on top right corner. You can edit field names and attributes by clicking on corresponding values.

Click OK to create the specified table.

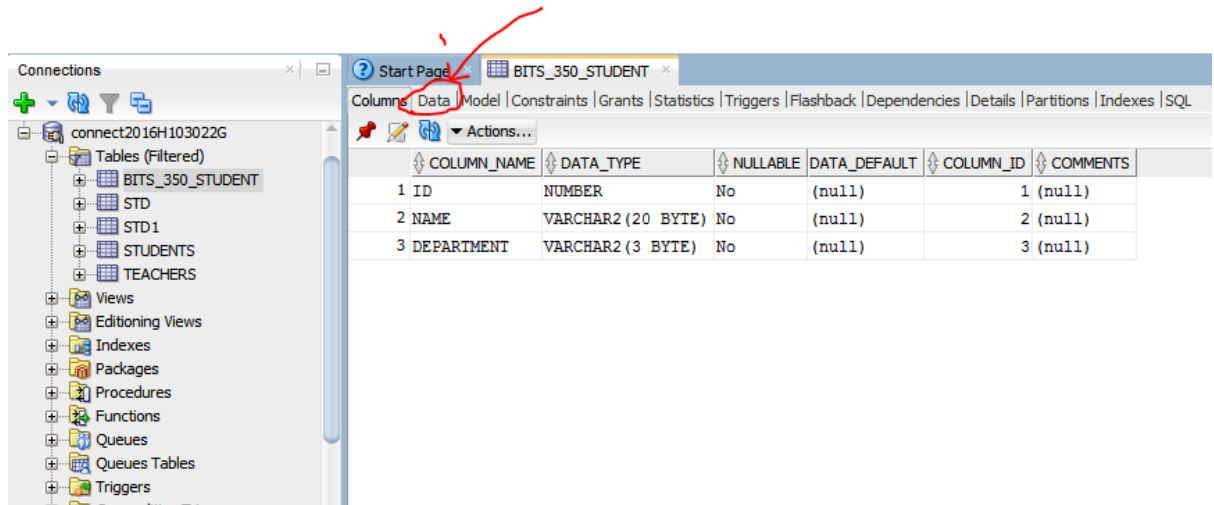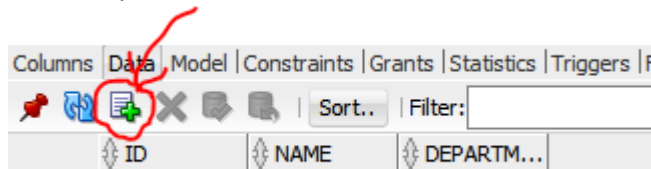5. You can check your table by clicking expand sign beside 'Tables'
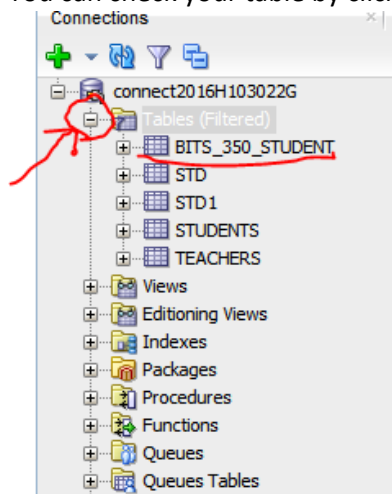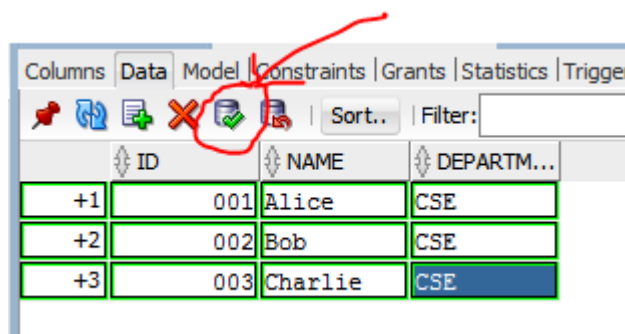
Inserting values into tables

1. Double click on table name to open the table in IDE. Click on 'Data' tab to open data editing tab
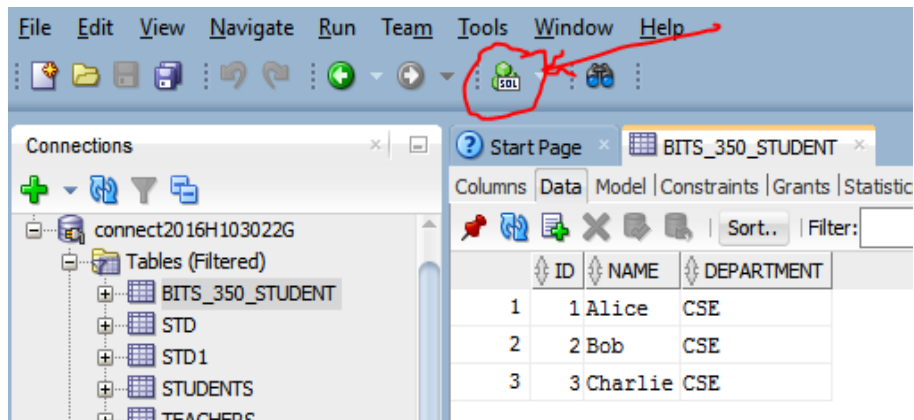

2. Click '+' symbol to insert rows

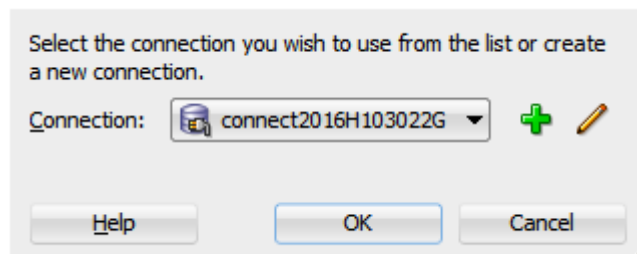3. Enter values and click commit(F11) to save your changes

TIP: Use tab key at last field to insert another row

Running SQL queries

1. Open SQL Worksheet using Alt+F10 or below symbol

2. Select your connection to work on worksheet and click OK

3. Write query in worksheet.
   Press run symbol or Ctrl+Enter to run the query