Application Modernisation with SCT

Step 1: Open the Chrome browser, download Amazon Corretto JDK 11 using this link
- https://corretto.aws/downloads/latest/amazon-corretto-11-x64-windows-jdk.msi

Step 2: Install the .msi file and just make everything default and install.

Step 3: Download the following files according to the instruction of the presenter (will be provided in the lab) and copy the following files to C:\Users\Administrator\Desktop\DMS Workshop\JDBC

1. webuserx_v2.sql
2. document_v2.sql
3. demoQuery.bat
4. querySalesDocuments.java

Step 4 : Open the SQL Developer (there is an icon in window task bar at the bottom)and create a new connection using the RDS Oracle Source Instance.
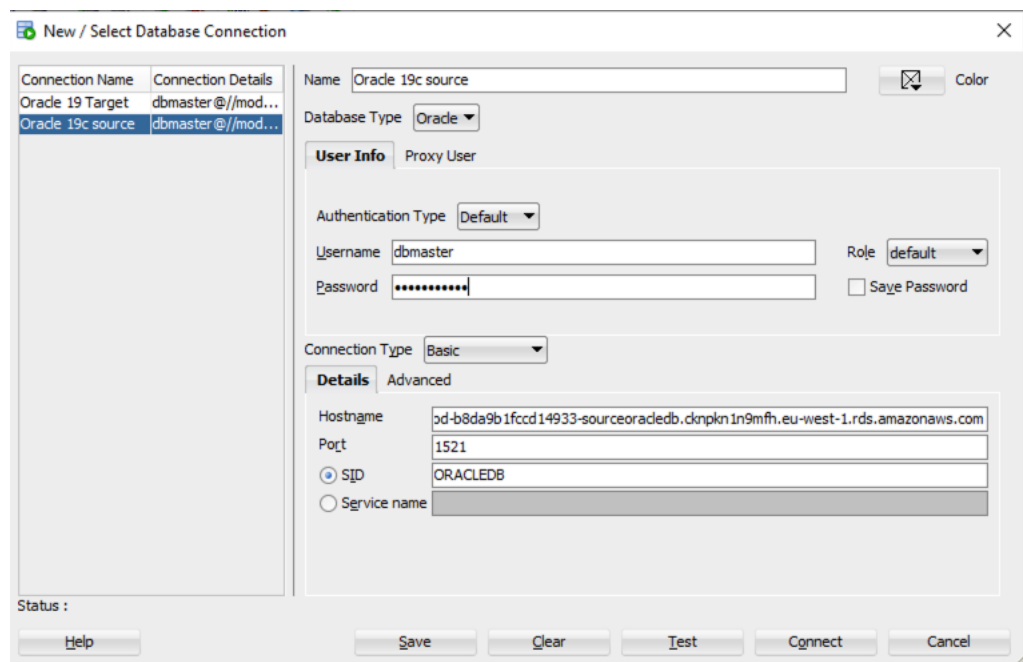
  i.   Please find the hostname from the endpoint in your RDS Oracle Source
        Instance under RDS Console
  ii.   Test the connection and connect.
  iii. In the menu Tools, select SQL Worksheet

iv. Copy the content from webuserx_v2.sql and paste in the SQL worksheet and click the 'Run Script' button. You can clear the worksheet after successfully executing the SQL to create and populate the table webuserx
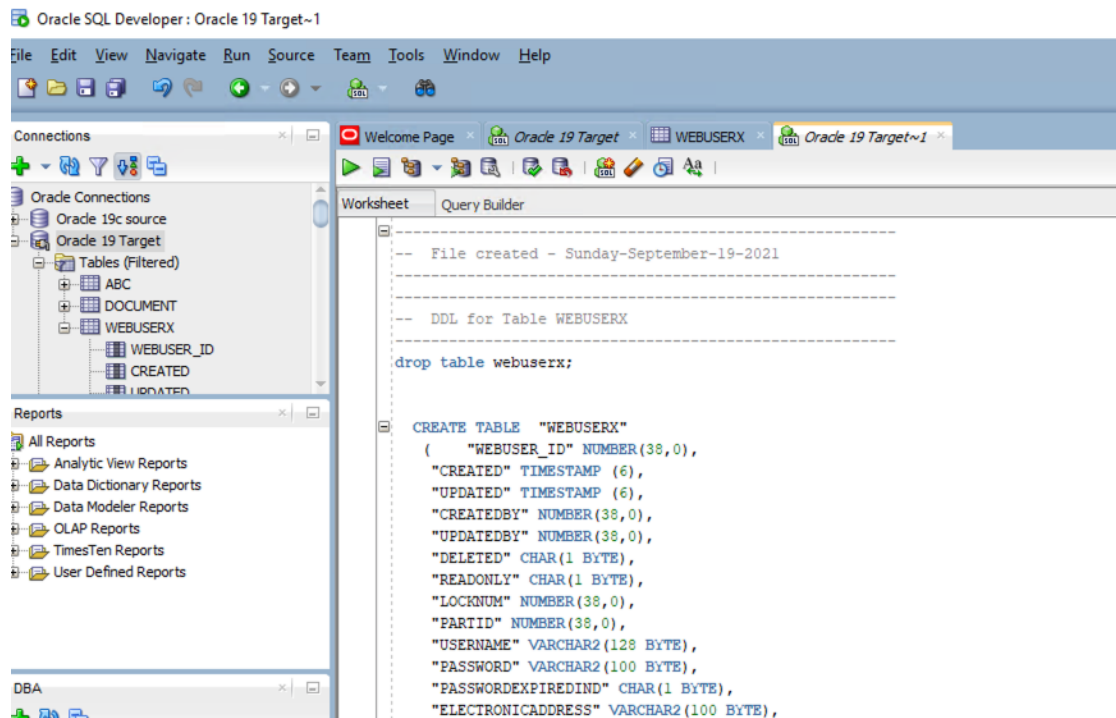
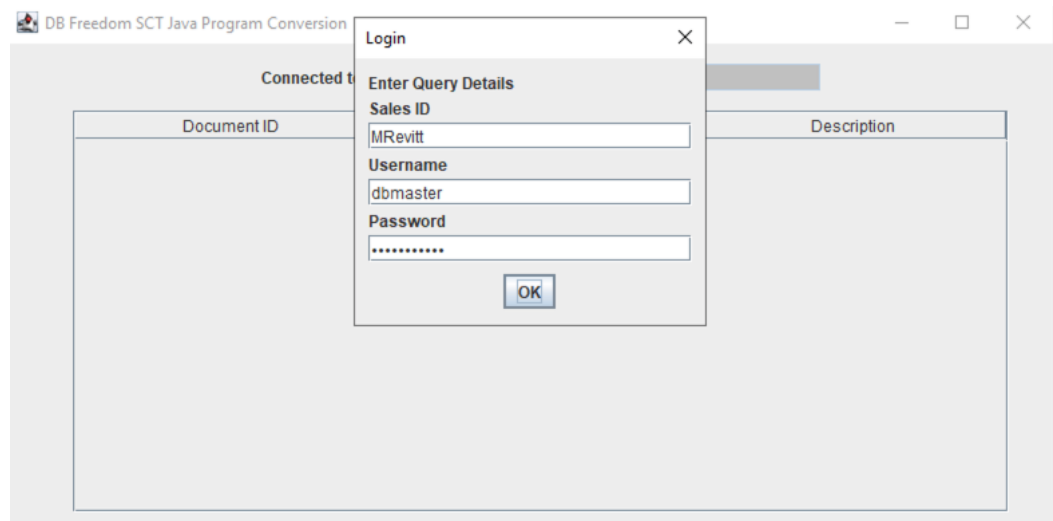v. Repeat the above step using document_v2.sql to create and populate the table document.

Step 5: Go to C:\Users\Administrator\Desktop\DMS Workshop\JDBC and open the file querySalesDocuments.java with notepad.exe and modify the below line

```
private static String ORAURL = "jdbc:oracle:thin:@//<change to your RDS
Oracle endpoint>:1521/ORACLEDB";
```

After you save it, **Close** this java file.

Step 6: open a command prompt and

   I.   cd C:\Users\Administrator\Desktop\DMS Workshop\JDBC
   II.   Type demoQuery.bat and hit return.
   III.   You should see a login screen and accept the default values and press ok

IV.   You should see the data from the java GUI:

V.   Once you can see the data, close the window (you should be back to command prompt).
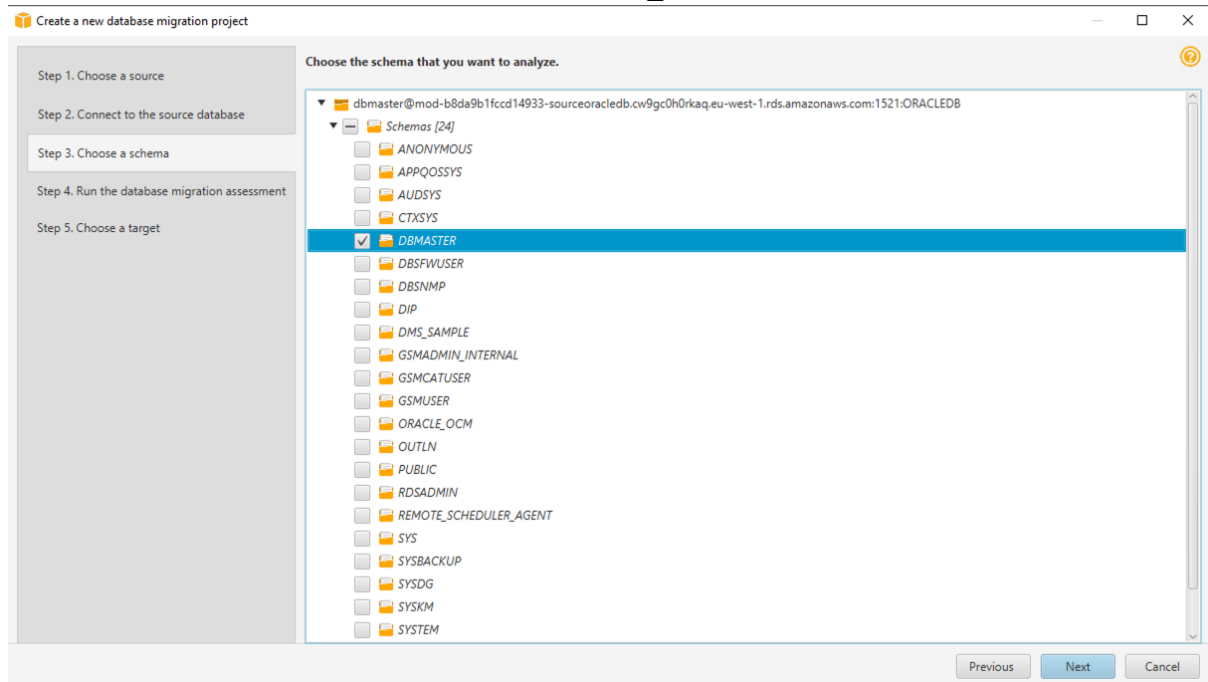
Step 7: Modify Java Program

Launch SCT

Launch SCT again (if it is closed), and select the new project wizard to convert from a transactional Oracle database to Aurora PostgreSQL.

For the connection details to both the Oracle and Aurora PostgreSQL databases, using the parameters from before or they filled up already if you did the SCT lab previously and may just need to type in the password 'dbmaster123'.

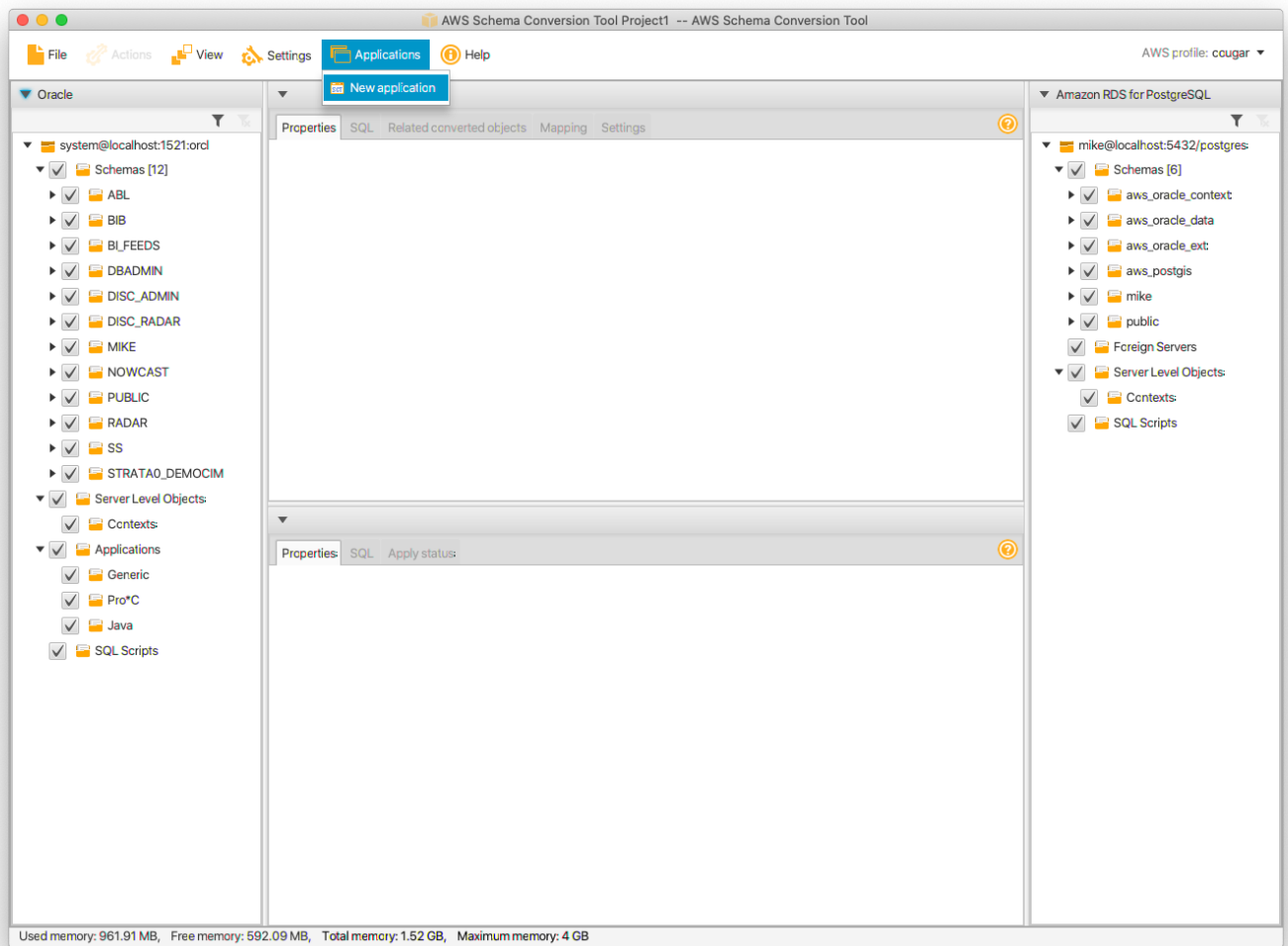Choose the schema **'DBMASTER'** instead of 'DMS_SAMPLE' .

(for details, refer to https://dms-immersionday.workshop.aws/en/oracle-aurora/schema-conversion/project/project.html but make sure you choose **'DBMASTER'** instead of 'DMS_SAMPLE')

From the source database, right click on 'DBMASTER' and click 'Convert Schema'
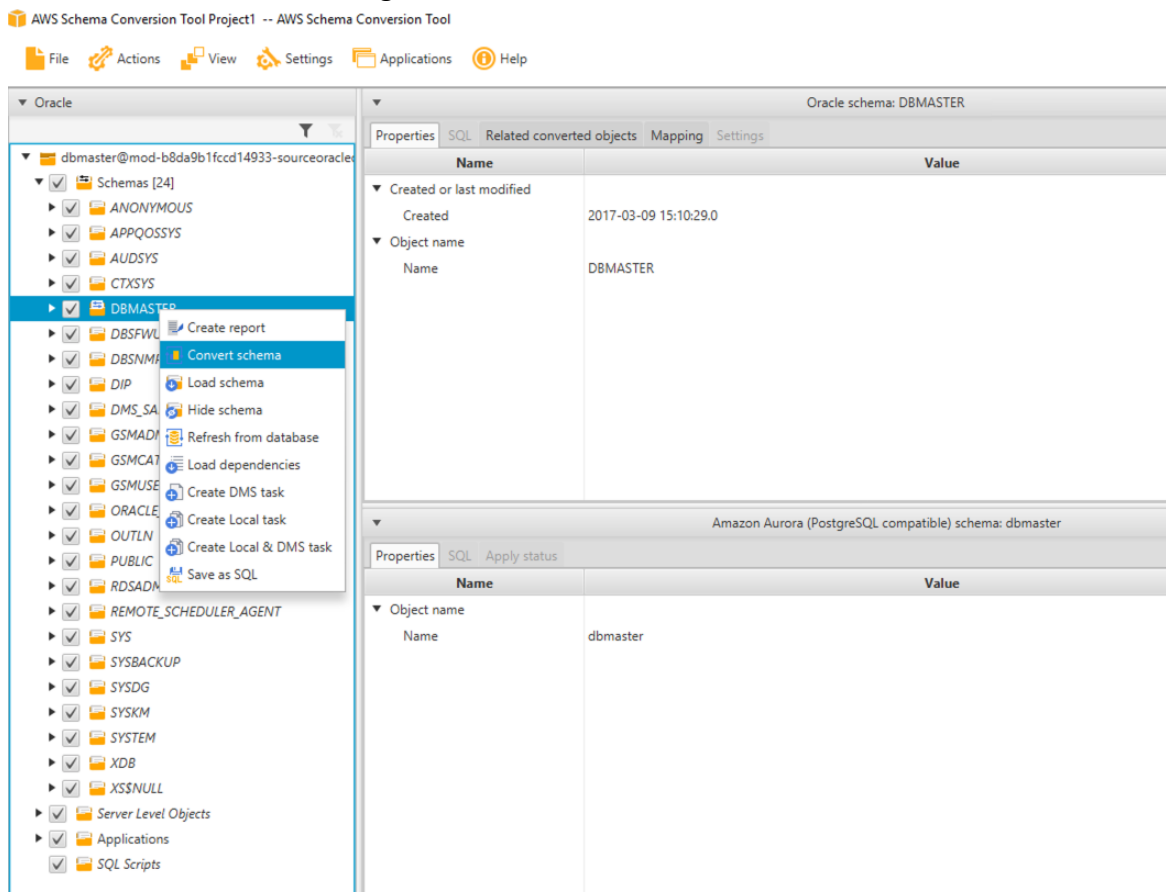
Create a New Application

Enter project information

Set the following information and create the project

- Location: C:\Users\Administrator\Desktop\DMS Workshop\JDBC
- Language: JAVA
- Target parameter style: Positional(?)
- Schema: dbmaster

Analyse Java Program

Locate and click on querySalesDocuments.java and then press the **Analyse** button
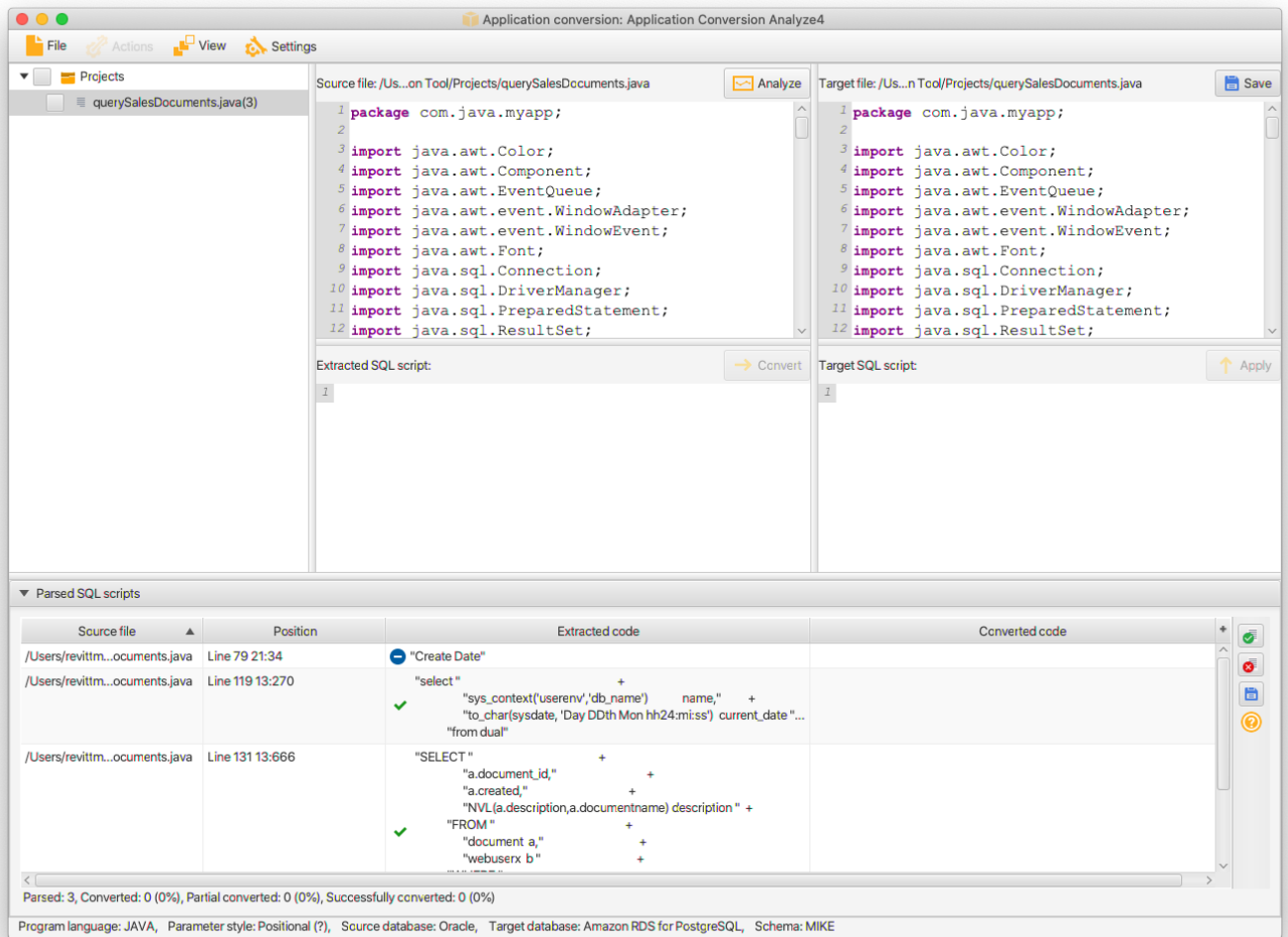
Convert Code

In the bottom section, **ignore** the first "Create Date" statement and go the next 2 statement

Highlight each of the select statements in turn and press the **'Convert'** button, examine the changed SQL. Then press the '**Apply'** button.

Then, press **Save** button on top right to update the java file and you can **close** SCT [**NOTE: make sure you are not opening querySalesDocuments.java in multiple editors like notepad or SCT at the same time**].
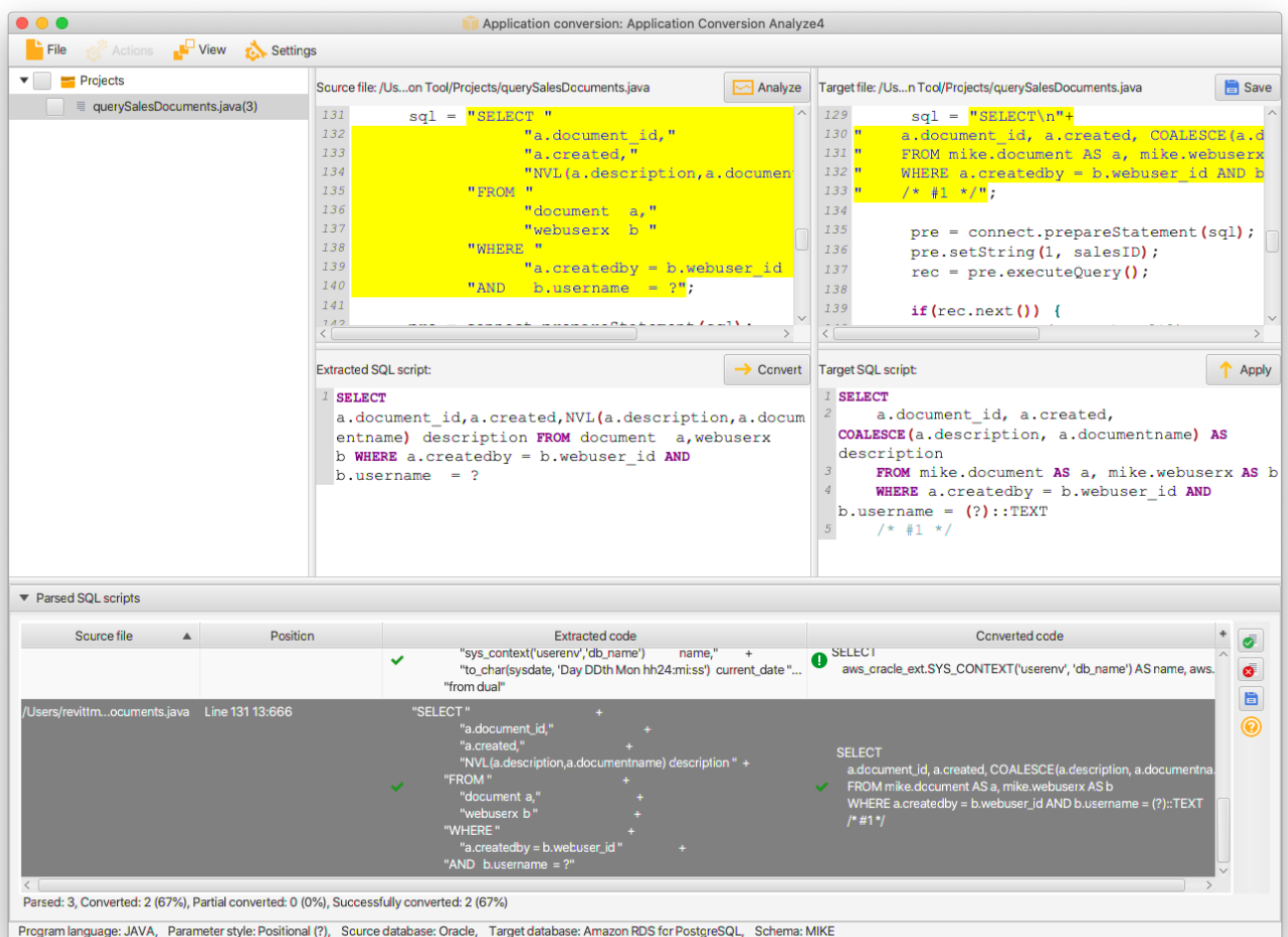
Step 8: Go to C:\Users\Administrator\Desktop\DMS Workshop\JDBC and open the file querySalesDocuments.java with notepad.exe and modify the below 2 lines

```
private static String POSTURL = "jdbc:postgresql://<change to your Aurora
PostgreSQL Cluster writer endpoint>:5432/AuroraDB";

private static  String           DBURL           = POSTURL;
```

(optional) Make the following change to the MyForm() function to distinguish the new program

- Change the color from yellow to green

Save the java file.

Step 9**:** [Ignore this step if the webuserx and document data from Oracle have been replicated to Aurora PostgreSQL in the previous lab] Replicate the webuserx and document data from Oracle to Aurora PostgreSQL via DMS using the previous lab for SCT and DMS but pick the schema 'DBMASTER' instead of 'DMS_SAMPLE'

- (https://dms-immersionday.workshop.aws/en/oracle-aurora/schema-conversion/project/project.html)

Step 10: Repeat Step 6 to run the Java program again.

Congratulations! You have successfully completed the application modernization lab.