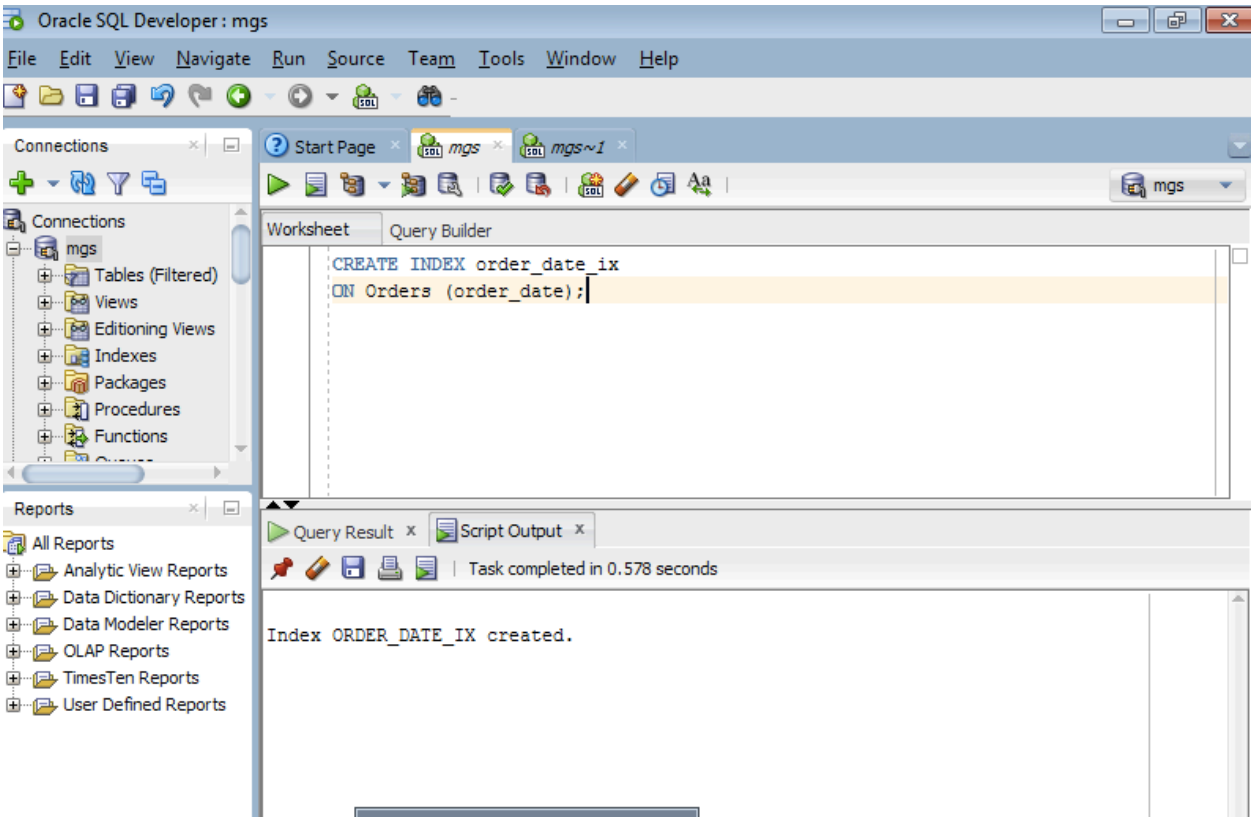
Assignment 5

Chapter 10:

1.

```
CREATE INDEX order_date_ix
ON Orders (order_date);
```



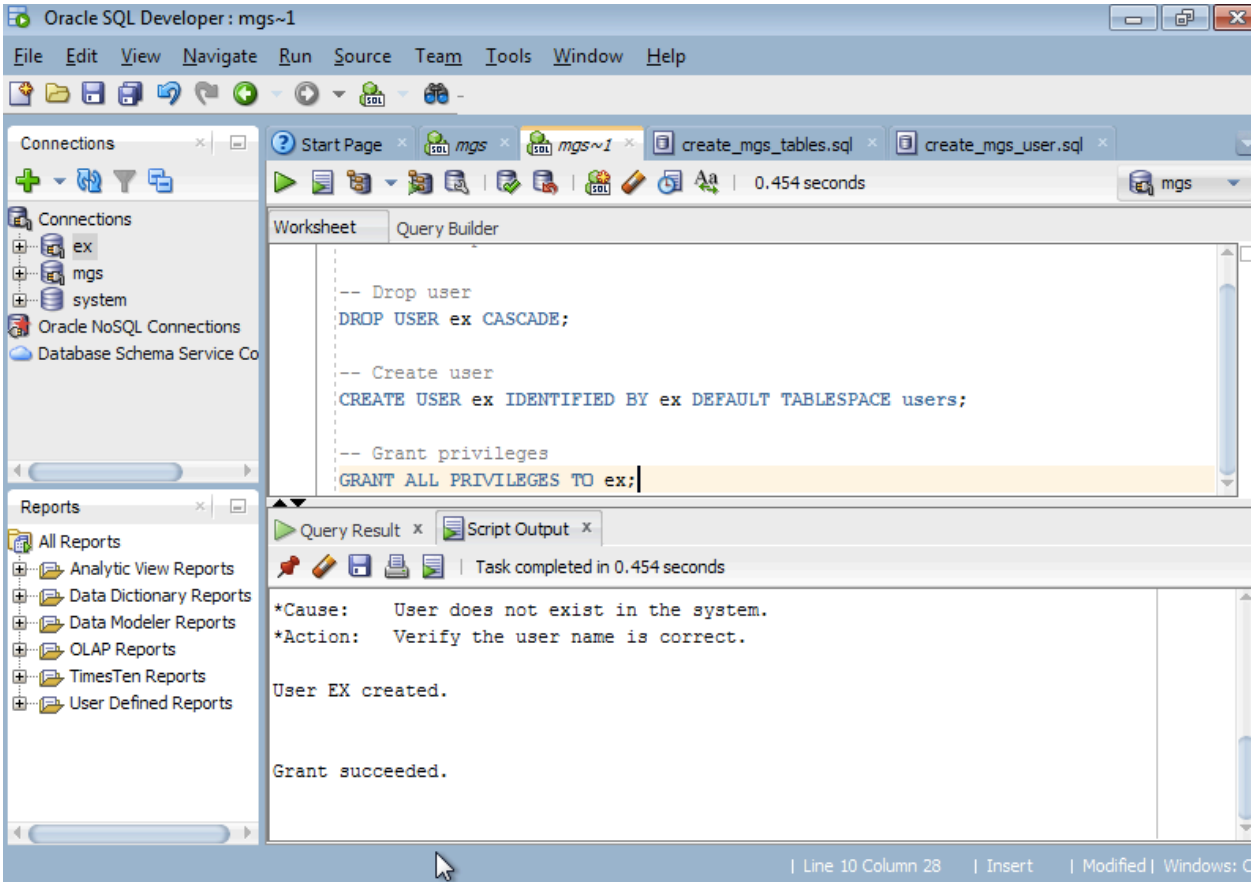
2.

-- This script creates the user named ex

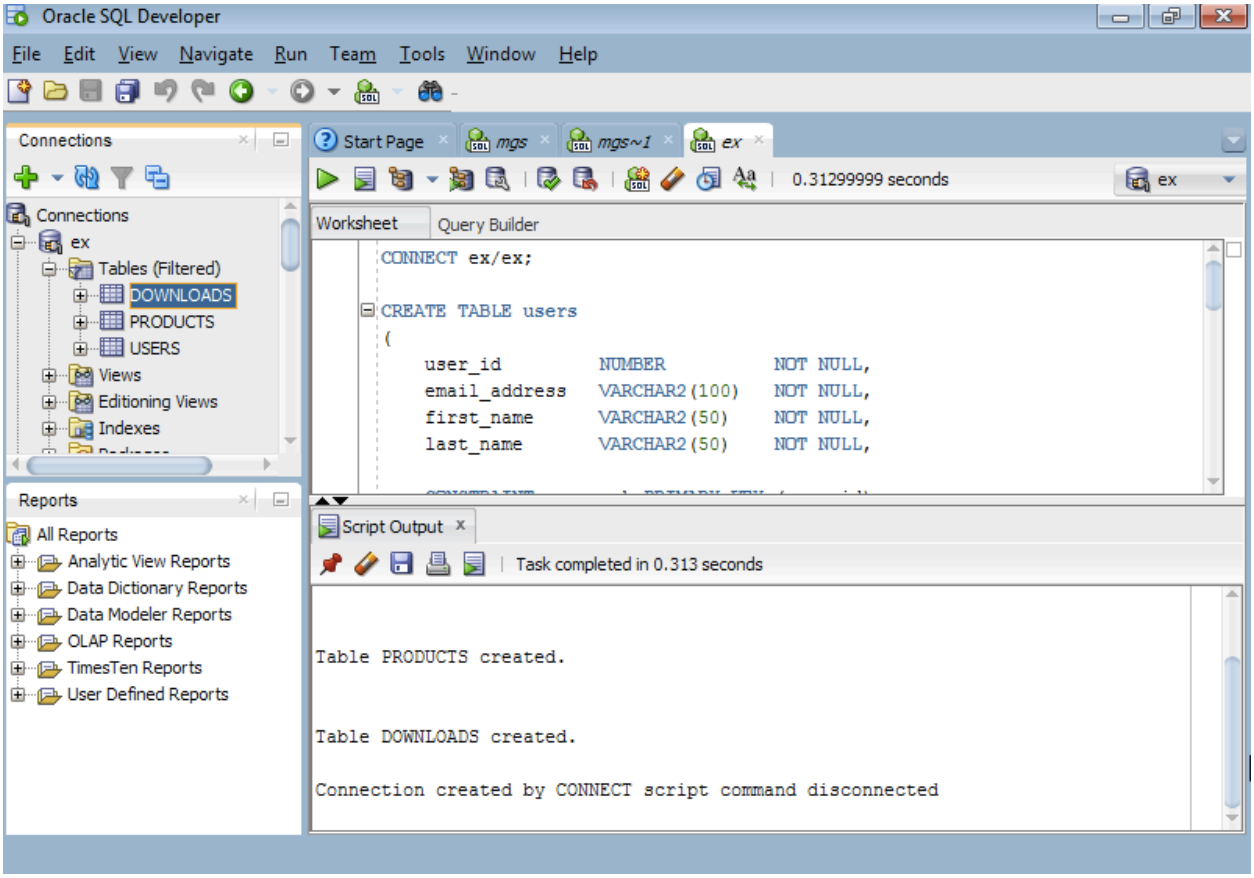
DROP USER ex CASCADE;

CREATE USER ex IDENTIFIED BY ex DEFAULT TABLESPACE users;

GRANT ALL PRIVILEGES TO ex;



```
CONNECT ex/ex;

CREATE TABLE users
(
   user_id        NUMBER         NOT NULL,
   email_address   VARCHAR2(100)   NOT NULL,
   first_name      VARCHAR2(50)    NOT NULL,
   last_name       VARCHAR2(50)    NOT NULL,

   CONSTRAINT users_pk PRIMARY KEY (user_id)
);


CREATE TABLE products
(
   product_id        NUMBER         NOT NULL,
   product_name      VARCHAR2(100)   NOT NULL,

   CONSTRAINT product_pk   PRIMARY KEY (product_id)
);


CREATE TABLE downloads
(
   download_id     NUMBER         NOT NULL,
   user_id         NUMBER         NOT NULL,
   download_date   DATE           NOT NULL,
   file_name       VARCHAR2(100)   NOT NULL,
   product_id      NUMBER         NOT NULL,

   CONSTRAINT downloads_pk    PRIMARY KEY (download_id),

   CONSTRAINT downloads_fk1   FOREIGN KEY (user_id)
            REFERENCES users(user_id),

   CONSTRAINT downloads_fk2    FOREIGN KEY (product_id)
            REFERENCES products (product_id)
);
```


Oracle SQL Developer
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Connections
Connections
ex
Tables (Filtered)
DOWNLOADS
PRODUCTS
USERS
Views
Editioning Views
Indexes
Reports
All Reports
Analytic View Reports
Data Dictionary Reports
Data Modeler Reports
OLAP Reports
TimesTen Reports
User Defined Reports
Start Page
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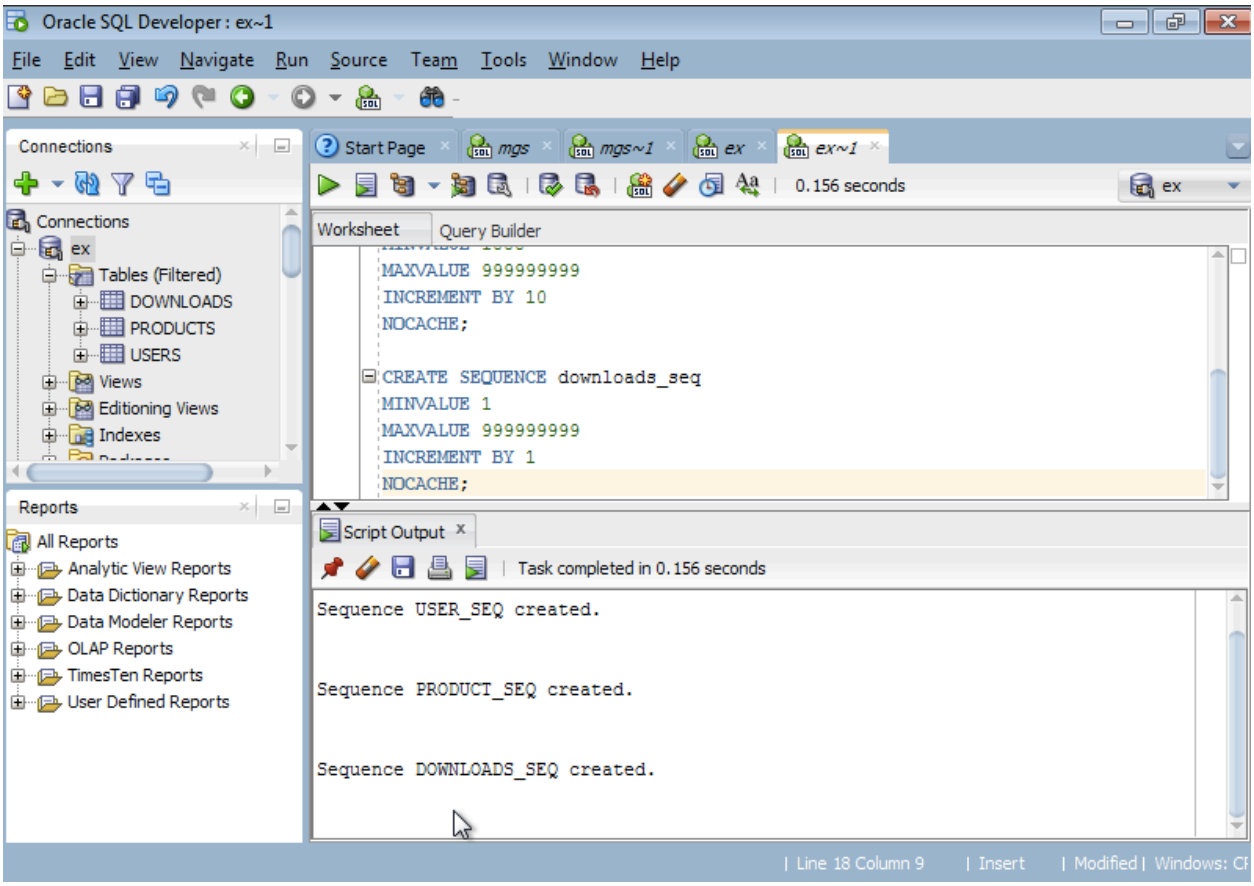
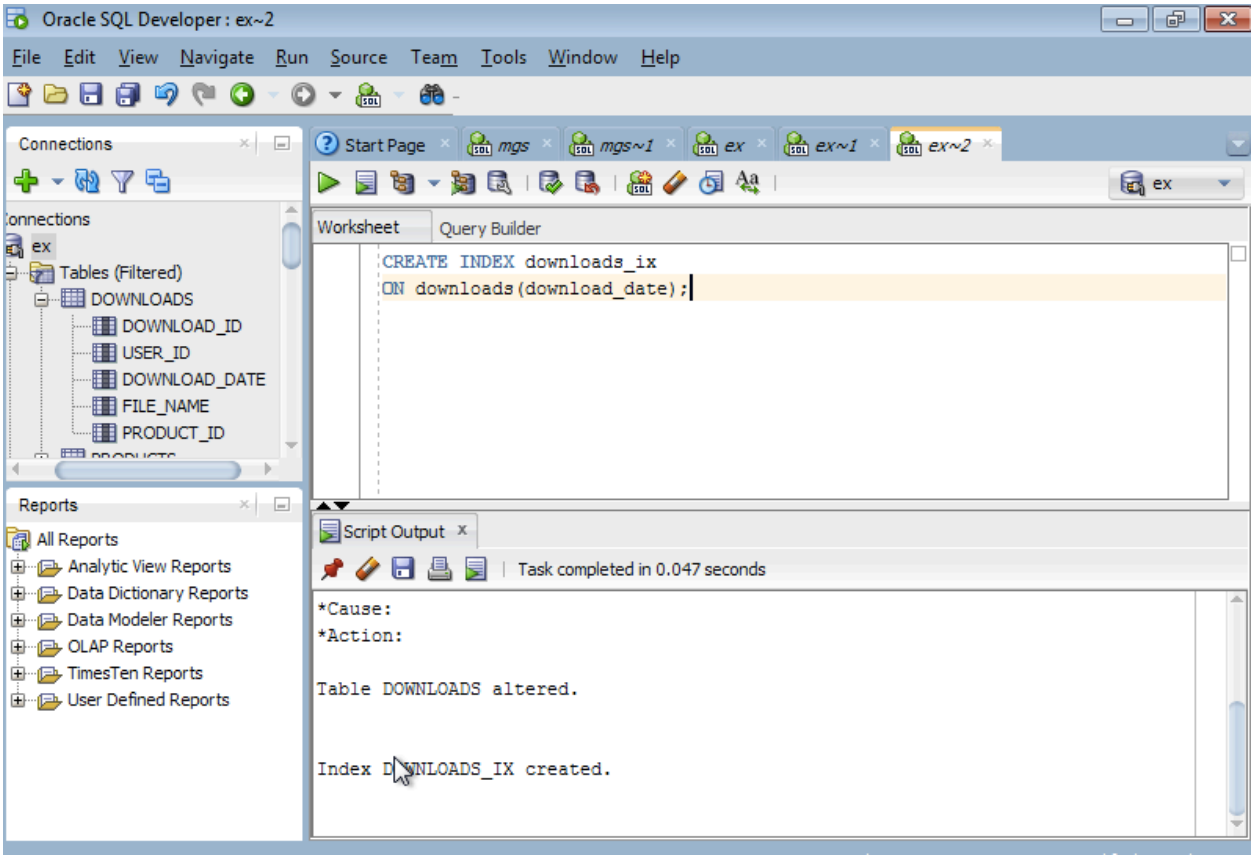
mgs~1
ex
0.31299999 seconds
ex
Worksheet
Query Builder
CONNECT ex/ex;
CREATE TABLE users
(
user_id NUMBER NOT NULL,
email_address VARCHAR2(100) NOT NULL,
first_name VARCHAR2(50) NOT NULL,
last_name VARCHAR2(50) NOT NULL,
Script Output
Task completed in 0.313 seconds
Table PRODUCTS created.
Table DOWNLOADS created.
Connection created by CONNECT script command disconnected

```
CREATE SEQUENCE user_seq
MINVALUE 10000
MAXVALUE 999999999
INCREMENT BY 1
NOCACHE;


CREATE SEQUENCE product_seq
MINVALUE 1000
MAXVALUE 999999999
INCREMENT BY 10
NOCACHE;

CREATE SEQUENCE downloads_seq
MINVALUE 1
MAXVALUE 999999999
INCREMENT BY 1
NOCACHE;
```



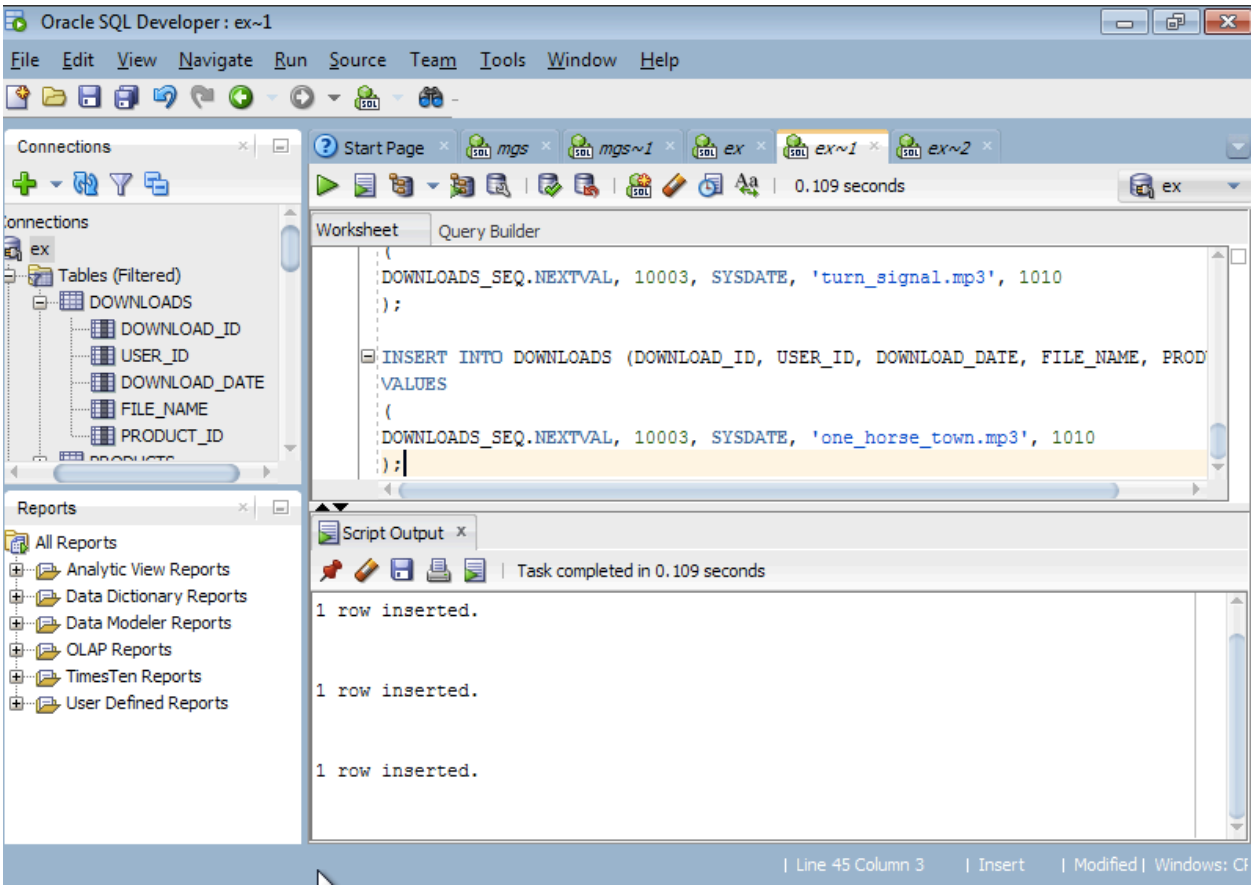
CREATE INDEX downloads_ix
ON downloads(download_date);



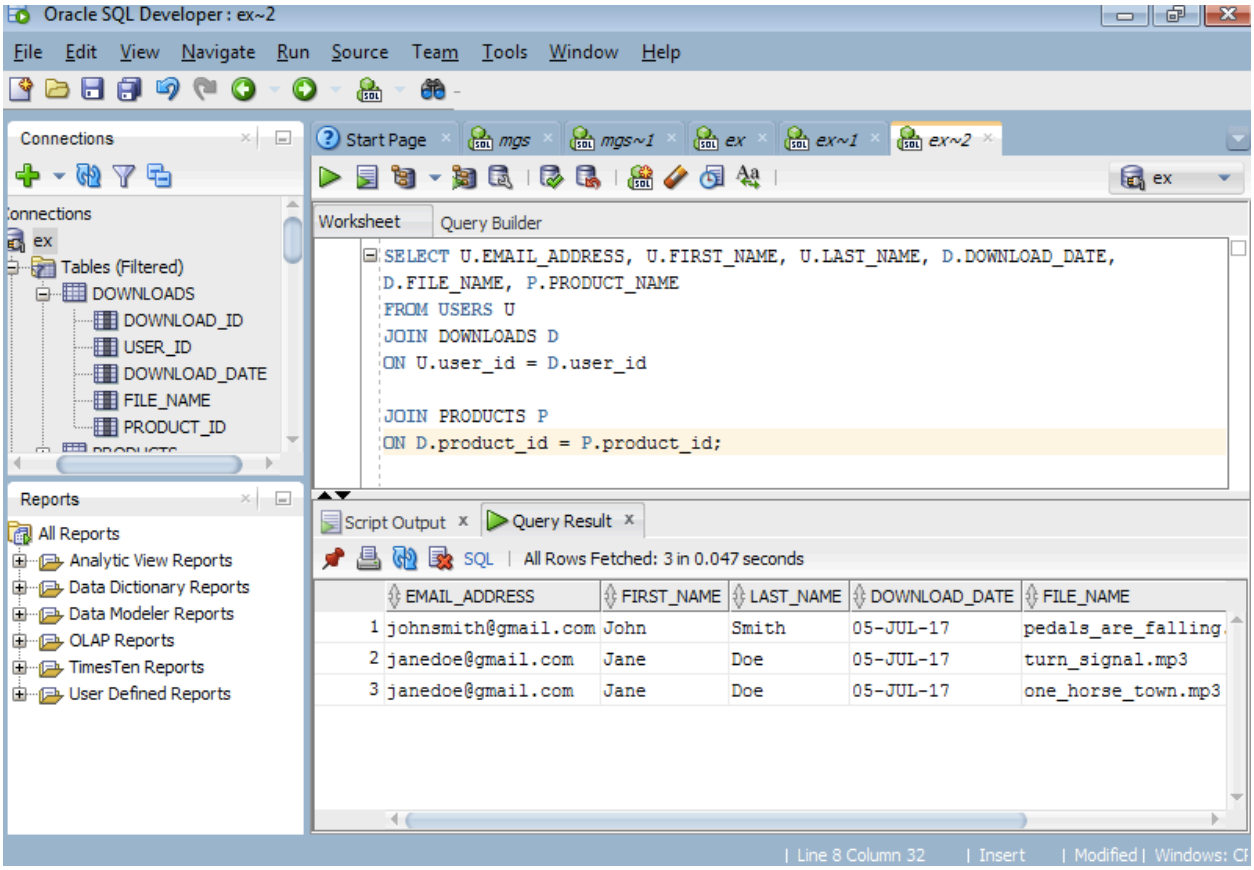
3.

```
INSERT INTO USERS (USER_ID, EMAIL_ADDRESS, FIRST_NAME, LAST_NAME)
VALUES
(
USER_SEQ.NEXTVAL, 'johnsmith@gmail.com', 'John', 'Smith'
);

INSERT INTO USERS (USER_ID, EMAIL_ADDRESS, FIRST_NAME, LAST_NAME)
VALUES
(
USER_SEQ.NEXTVAL, 'janedoe@gmail.com', 'Jane', 'Doe'
);


INSERT INTO PRODUCTS (PRODUCT_ID, PRODUCT_NAME)
VALUES
(
PRODUCT_SEQ.NEXTVAL, 'Local Music Vol 1'
);

INSERT INTO PRODUCTS (PRODUCT_ID, PRODUCT_NAME)
VALUES
(
PRODUCT_SEQ.NEXTVAL, 'Local Music Vol 2'
);



INSERT INTO DOWNLOADS (DOWNLOAD_ID, USER_ID, DOWNLOAD_DATE, FILE_NAME,
PRODUCT_ID)
VALUES
(
DOWNLOADS_SEQ.NEXTVAL, 10002, SYSDATE, 'pedals_are_falling.mp3', 1000
);

INSERT INTO DOWNLOADS (DOWNLOAD_ID, USER_ID, DOWNLOAD_DATE, FILE_NAME,
PRODUCT_ID)
VALUES
(
DOWNLOADS_SEQ.NEXTVAL, 10003, SYSDATE, 'turn_signal.mp3', 1010
);
```

```
INSERT INTO DOWNLOADS (DOWNLOAD_ID, USER_ID, DOWNLOAD_DATE, FILE_NAME,
PRODUCT_ID)
VALUES
(
DOWNLOADS_SEQ.NEXTVAL, 10003, SYSDATE, 'one_horse_town.mp3', 1010
);
```

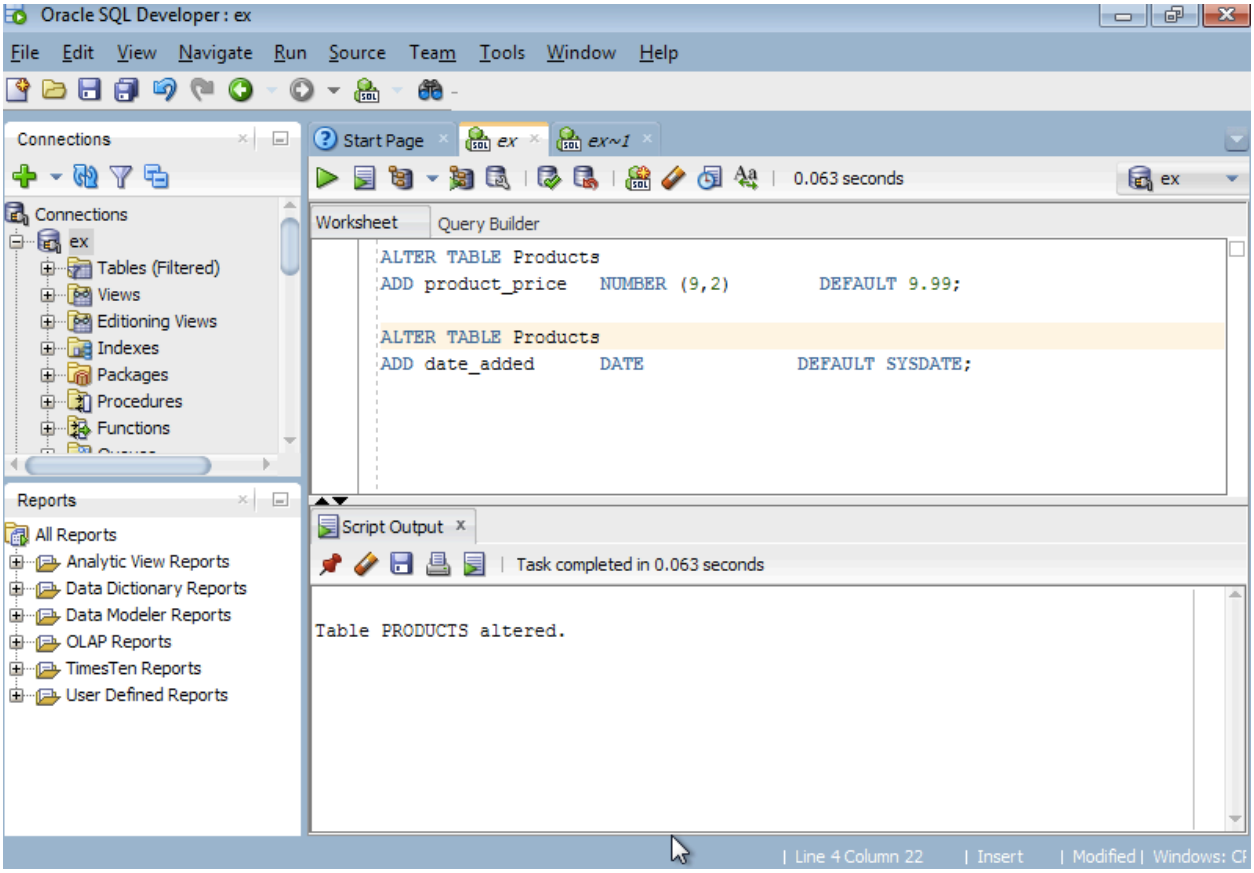


```
SELECT U.EMAIL_ADDRESS, U.FIRST_NAME, U.LAST_NAME, D.DOWNLOAD_DATE,
D.FILE_NAME, P.PRODUCT_NAME
FROM USERS U
JOIN DOWNLOADS D
ON U.user_id = D.user_id

JOIN PRODUCTS P
ON D.product_id = P.product_id


ORDER BY U.email_address DESC;
```



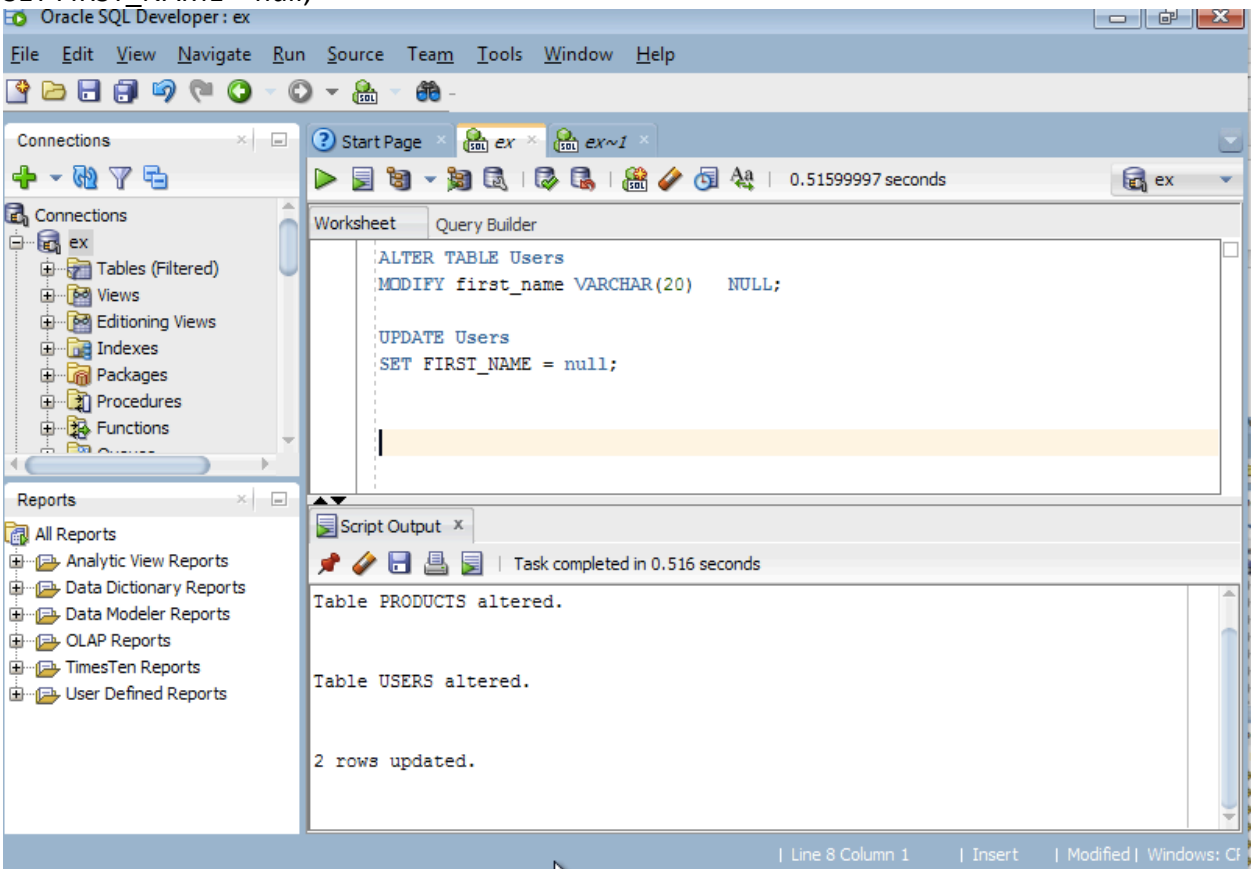
4.

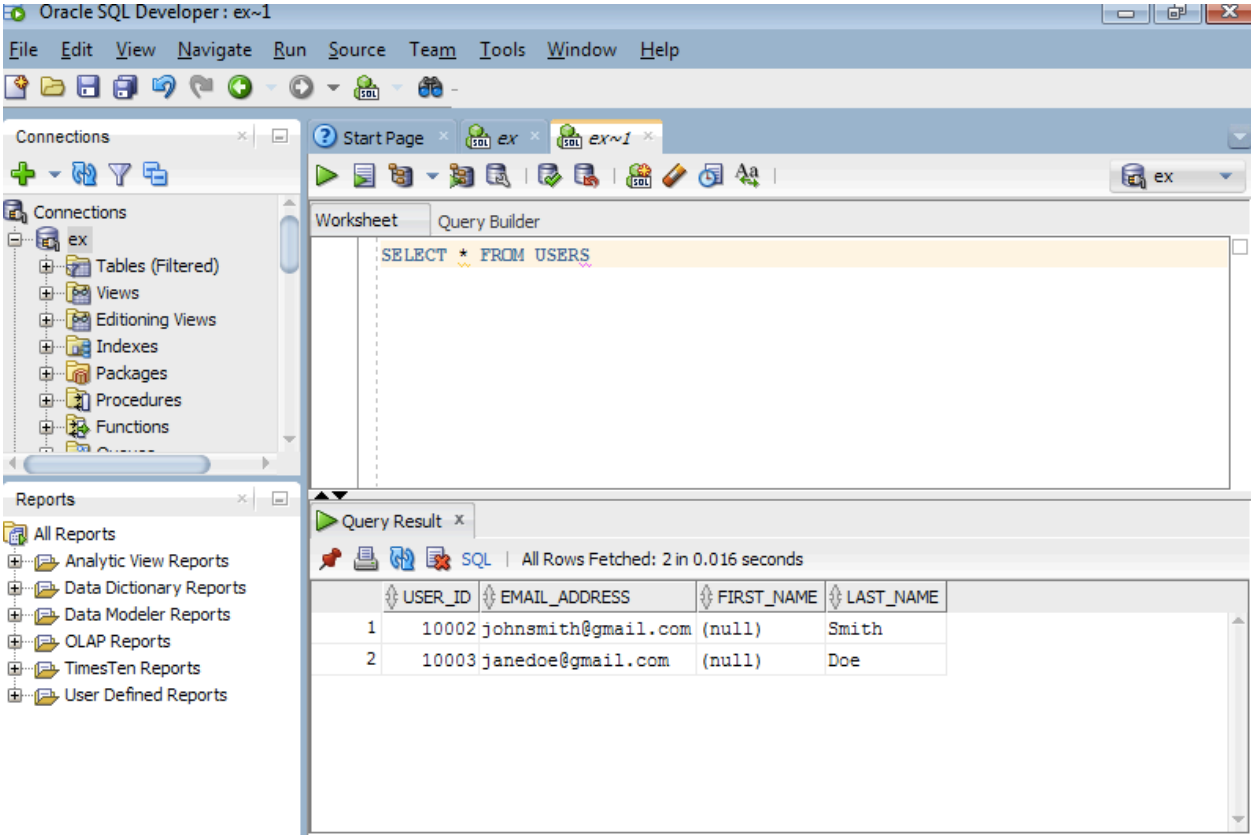
```
ALTER TABLE Products
ADD product_price   NUMBER (9,2)       DEFAULT 9.99;

ALTER TABLE Products
ADD date_added      DATE            DEFAULT SYSDATE;
```



5.

```
ALTER TABLE Users
MODIFY first_name VARCHAR(20)   NULL;

UPDATE Users
SET FIRST_NAME = null;
```




Oracle SQL Developer : ex~1
File Edit View Navigate Run Source Team Tools Window Help
Connections
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Tables (Filtered)
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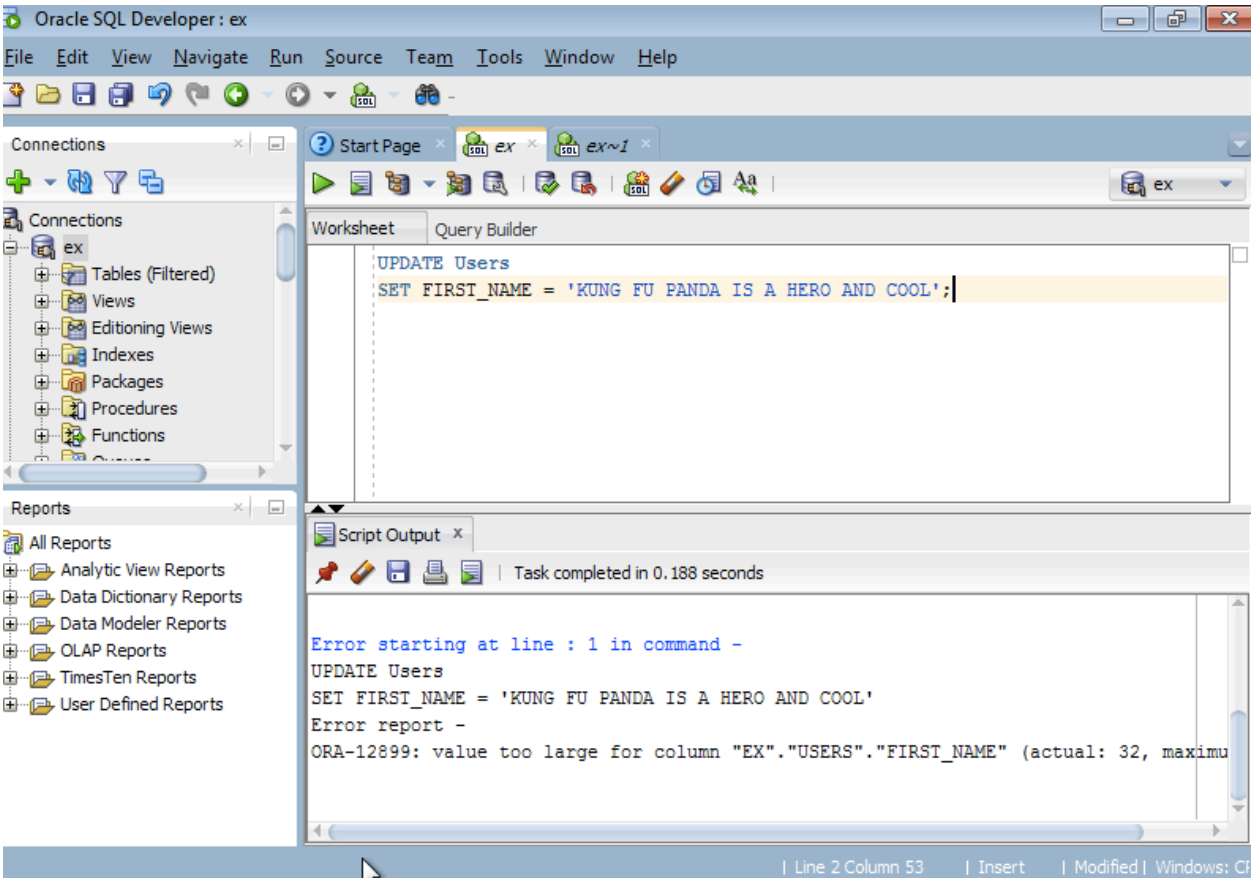
Indexes
Packages
Procedures
Functions
Reports
All Reports
Analytic View Reports
Data Dictionary Reports
Data Modeler Reports
OLAP Reports
TimesTen Reports
User Defined Reports
Start Page
ex
ex~1
Worksheet
Query Builder
SELECT * FROM USERS
Query Result
SQL | All Rows Fetched: 2 in 0.016 seconds
USER_ID EMAIL_ADDRESS FIRST_NAME LAST_NAME
1 10002 johnsmith@gmail.com (null) Smith
2 10003 janedoe@gmail.com (null) Doe

Error Statement:

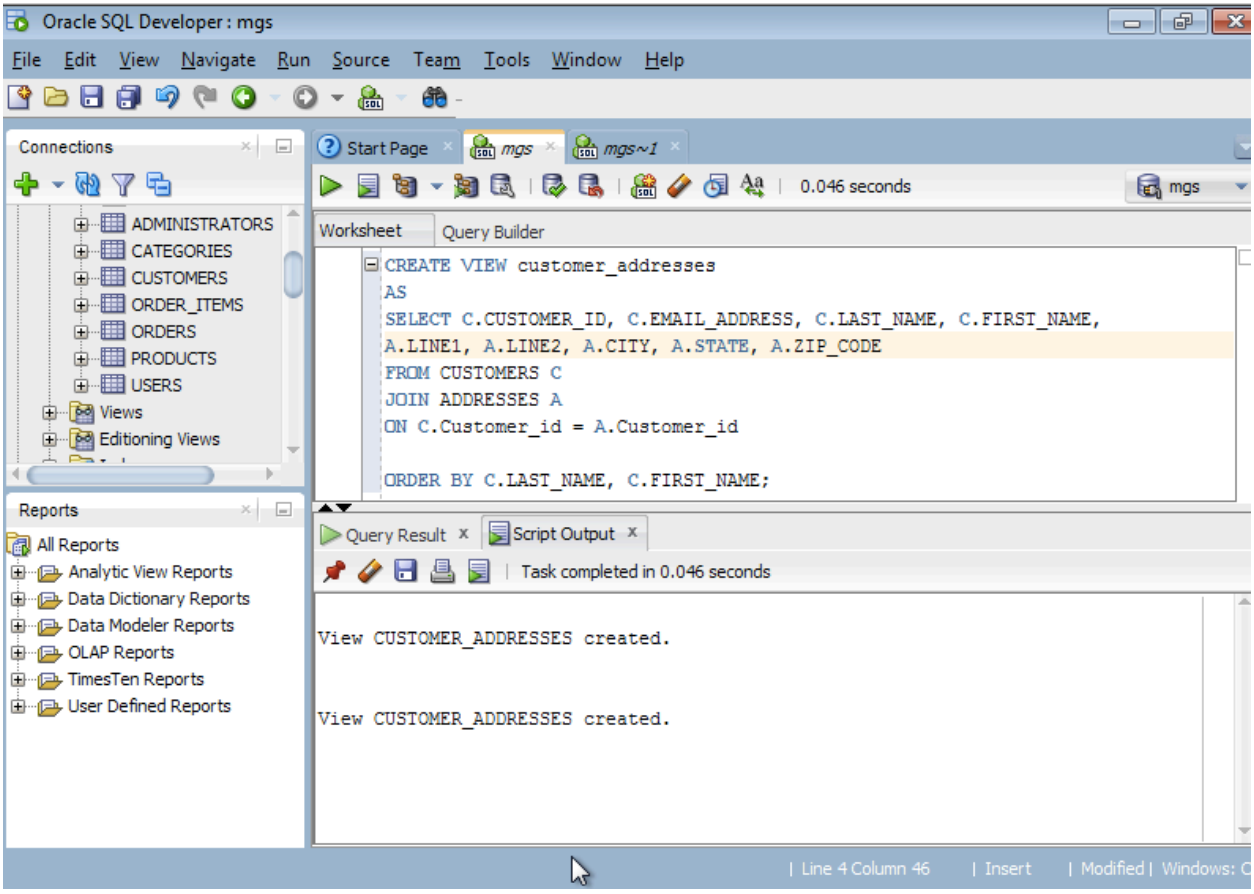
UPDATE Users
SET FIRST_NAME = 'KUNG FU PANDA IS A HERO AND COOL';



CHAPTER 11:

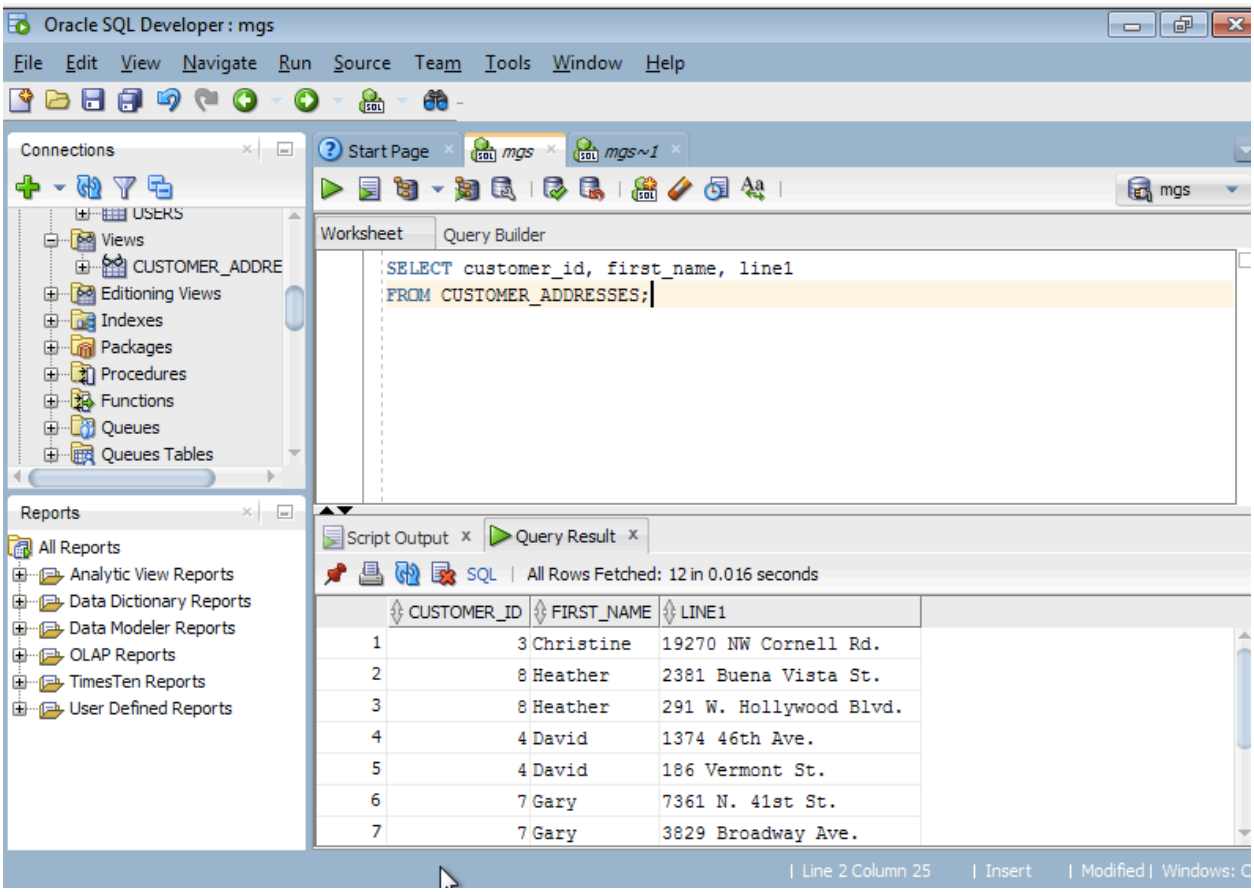
1.
NOTE* Missing columns in ADDRESSES table**

```
CREATE VIEW customer_addresses
AS
SELECT C.CUSTOMER_ID, C.EMAIL_ADDRESS, C.LAST_NAME, C.FIRST_NAME,
A.LINE1, A.LINE2, A.CITY, A.STATE, A.ZIP_CODE
FROM CUSTOMERS C
JOIN ADDRESSES A
ON C.Customer_id = A.Customer_id
ORDER BY C.LAST_NAME, C.FIRST_NAME;
```



2.

SELECT customer_id, first_name, line1
FROM CUSTOMER_ADDRESSES;

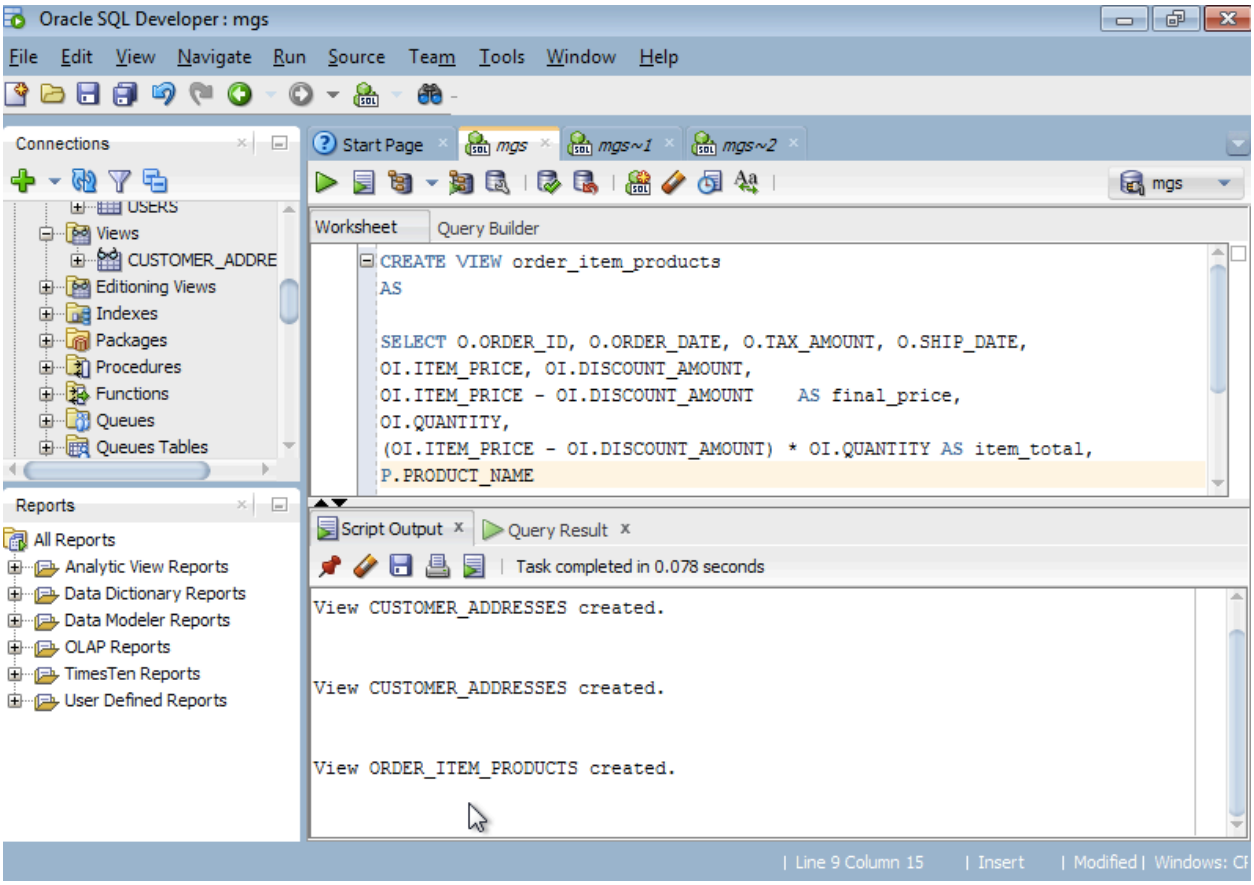


3.

```
CREATE VIEW order_item_products
AS

SELECT O.ORDER_ID, O.ORDER_DATE, O.TAX_AMOUNT, O.SHIP_DATE,
OI.ITEM_PRICE, OI.DISCOUNT_AMOUNT,
OI.ITEM_PRICE - OI.DISCOUNT_AMOUNT    AS final_price,
OI.QUANTITY,
(OI.ITEM_PRICE - OI.DISCOUNT_AMOUNT) * OI.QUANTITY AS item_total,
P.PRODUCT_NAME
FROM ORDERS O
JOIN ORDER_ITEMS OI
ON O.Order_id = OI.Order_id

JOIN PRODUCTS P
ON OI.Product_id = P.Product_id
```

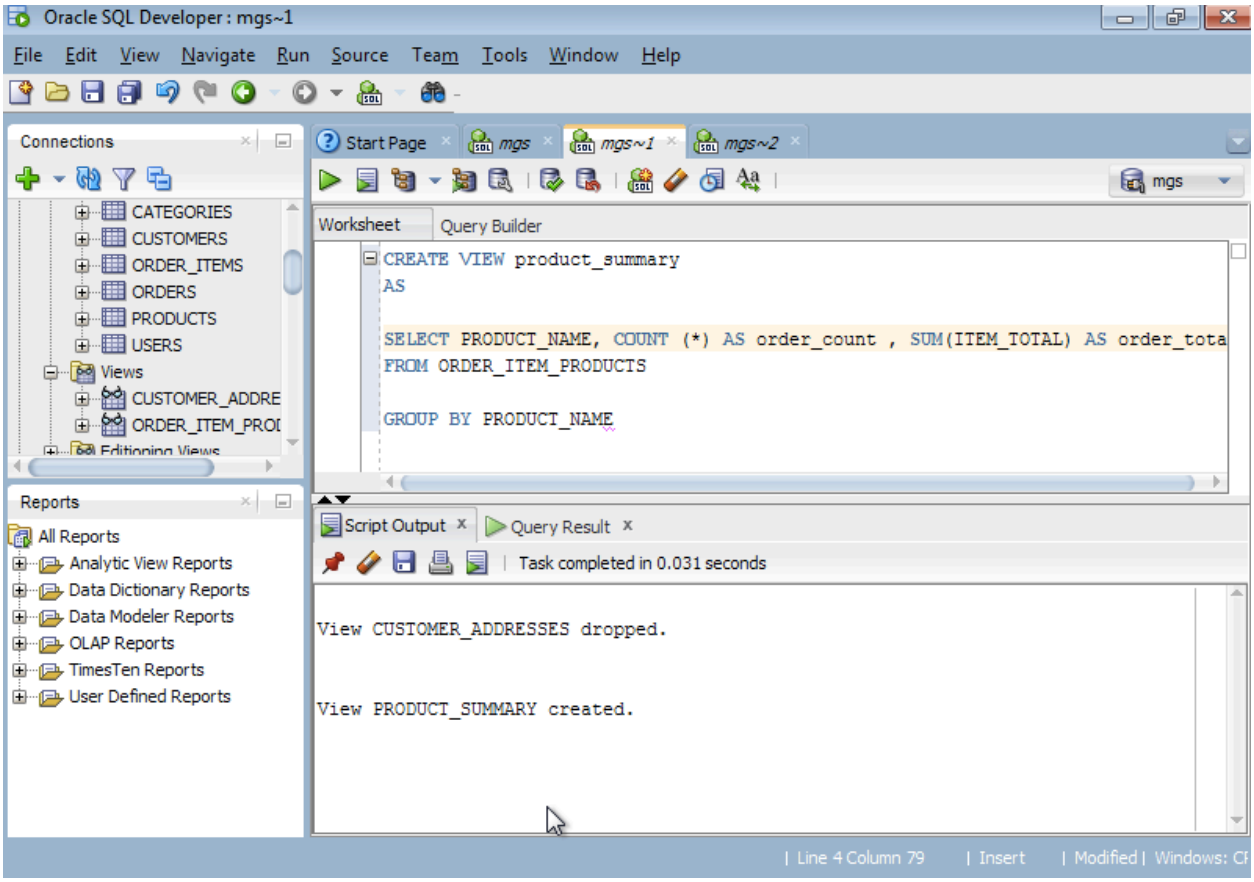


4.

CREATE VIEW product_summary
AS

SELECT PRODUCT_NAME, COUNT (*) AS order_count , SUM(ITEM_TOTAL) AS order_total
FROM ORDER_ITEM_PRODUCTS

GROUP BY PRODUCT_NAME;



5.

```
SELECT *
FROM PRODUCT_SUMMARY
WHERE ROWNUM <=5

ORDER BY ORDER_TOTAL DESC;
```