

Hands on Assignment#6

To perform the following assignments, refer to the tables created in the JLDB_Build_5.sql script at the beginning of the chapter.

1. Add a new row in the ORDERS table with the following data: Order# = 1021, Customer# = 1009, and Order date = July 20, 2009.

Answer.

Insert INTO Orders(Order#, Customer#, ORDERDATE) VALUES ('1021', '1009', '20-Jul-2009');

The screenshot shows the SQL Developer interface. At the top, the command window displays the following SQL statement: `/*Name - Ankur Prajapati Assignment#-6 Question Number: 01 */ Insert INTO Orders(Order#, Customer#, ORDERDATE) VALUES ('1021', '1009', '20-Jul-2009');`. Below the command window, the 'Query Result' tab is active, showing a table with 10 columns: ORDER#, CUSTOMER#, ORDERDATE, SHIPDATE, SHIPSTREET, SHIPCITY, SHIPSTATE, SHIPZIP, and SHIPCOST. The table contains 22 rows of data. The last row, with index 22, represents the newly inserted record: Order# 1021, Customer# 1009, ORDERDATE 20-07-09, SHIPDATE (null), SHIPSTREET (null), SHIPCITY (null), SHIPSTATE (null), SHIPZIP (null), and SHIPCOST (null).

| | ORDER# | CUSTOMER# | ORDERDATE | SHIPDATE | SHIPSTREET | SHIPCITY | SHIPSTATE | SHIPZIP | SHIPCOST |
|----|--------|-----------|-----------|----------|--------------------|-------------|-----------|---------|----------|
| 5 | 1004 | 1020 | 01-04-09 | 05-04-09 | 561 ROUNDABOUT WAY | TRENTON | NJ | 08601 | (null) |
| 6 | 1005 | 1018 | 01-04-09 | 02-04-09 | 1008 GRAND AVENUE | MACON | GA | 31206 | 2 |
| 7 | 1006 | 1003 | 01-04-09 | 02-04-09 | 558A CAPITOL HWY. | TALLAHASSEE | FL | 32307 | 2 |
| 8 | 1007 | 1007 | 02-04-09 | 04-04-09 | 9153 MAIN STREET | AUSTIN | TX | 78710 | 7 |
| 9 | 1008 | 1004 | 02-04-09 | 03-04-09 | 69821 SOUTH AVENUE | BOISE | ID | 83707 | 3 |
| 10 | 1009 | 1005 | 03-04-09 | 05-04-09 | 9 LIGHTENING RD. | SEATTLE | WA | 98110 | (null) |
| 11 | 1010 | 1019 | 03-04-09 | 04-04-09 | 384 WRONG WAY HOME | MORRISTOWN | NJ | 07960 | 2 |
| 12 | 1011 | 1010 | 03-04-09 | 05-04-09 | 102 WEST LAFAYETTE | ATLANTA | GA | 30311 | 2 |
| 13 | 1012 | 1017 | 03-04-09 | (null) | 1295 WINDY AVENUE | KALMAZOO | MI | 49002 | 6 |
| 14 | 1013 | 1014 | 03-04-09 | 04-04-09 | 7618 MOUNTAIN RD. | CODY | WY | 82414 | 2 |
| 15 | 1014 | 1007 | 04-04-09 | 05-04-09 | 9153 MAIN STREET | AUSTIN | TX | 78710 | 3 |
| 16 | 1015 | 1020 | 04-04-09 | (null) | 557 GLITTER ST. | TRENTON | NJ | 08606 | 2 |
| 17 | 1016 | 1003 | 04-04-09 | (null) | 9901 SEMINOLE WAY | TALLAHASSEE | FL | 32307 | 2 |
| 18 | 1017 | 1015 | 04-04-09 | 05-04-09 | 887 HOT ASPHALT ST | MIAMI | FL | 33222 | 3 |
| 19 | 1018 | 1001 | 05-04-09 | (null) | 95812 HIGHWAY 98 | EASTPOINT | FL | 32328 | (null) |
| 20 | 1019 | 1018 | 05-04-09 | (null) | 1008 GRAND AVENUE | MACON | GA | 31206 | 2 |
| 21 | 1020 | 1008 | 05-04-09 | (null) | 195 JAMISON LANE | CHEYENNE | WY | 82003 | 2 |
| 22 | 1021 | 1009 | 20-07-09 | (null) | (null) | (null) | (null) | (null) | (null) |

2. Modify the zip code on order 1017 to 33222.

Answer.

Update Orders SET SHIPZIP = 33222 WHERE ORDER# = 1017;

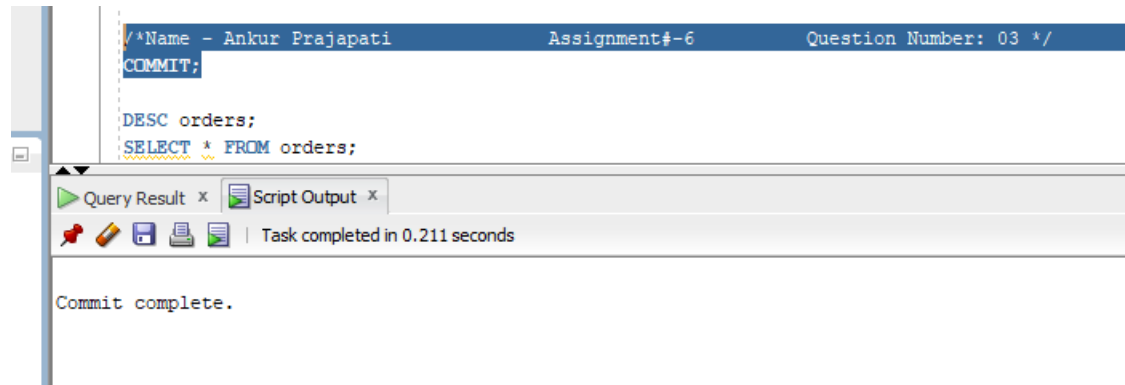
The screenshot shows the SQL Developer interface. At the top, the command window displays the following SQL statement: `/*Name - Ankur Prajapati Assignment#-6 Question Number: 02 */ Update Orders SET SHIPZIP = 33222 WHERE ORDER# = 1017;`. Below the command window, the 'Query Result' tab is active, showing the same table as before, but with the SHIPZIP value for Order# 1017 updated to 33222.

| | ORDER# | CUSTOMER# | ORDERDATE | SHIPDATE | SHIPSTREET | SHIPCITY | SHIPSTATE | SHIPZIP | SHIPCOST |
|----|--------|-----------|-----------|----------|--------------------|-------------|-----------|---------|----------|
| 5 | 1004 | 1020 | 01-04-09 | 05-04-09 | 561 ROUNDABOUT WAY | TRENTON | NJ | 08601 | (null) |
| 6 | 1005 | 1018 | 01-04-09 | 02-04-09 | 1008 GRAND AVENUE | MACON | GA | 31206 | 2 |
| 7 | 1006 | 1003 | 01-04-09 | 02-04-09 | 558A CAPITOL HWY. | TALLAHASSEE | FL | 32307 | 2 |
| 8 | 1007 | 1007 | 02-04-09 | 04-04-09 | 9153 MAIN STREET | AUSTIN | TX | 78710 | 7 |
| 9 | 1008 | 1004 | 02-04-09 | 03-04-09 | 69821 SOUTH AVENUE | BOISE | ID | 83707 | 3 |
| 10 | 1009 | 1005 | 03-04-09 | 05-04-09 | 9 LIGHTENING RD. | SEATTLE | WA | 98110 | (null) |
| 11 | 1010 | 1019 | 03-04-09 | 04-04-09 | 384 WRONG WAY HOME | MORRISTOWN | NJ | 07960 | 2 |
| 12 | 1011 | 1010 | 03-04-09 | 05-04-09 | 102 WEST LAFAYETTE | ATLANTA | GA | 30311 | 2 |
| 13 | 1012 | 1017 | 03-04-09 | (null) | 1295 WINDY AVENUE | KALMAZOO | MI | 49002 | 6 |
| 14 | 1013 | 1014 | 03-04-09 | 04-04-09 | 7618 MOUNTAIN RD. | CODY | WY | 82414 | 2 |
| 15 | 1014 | 1007 | 04-04-09 | 05-04-09 | 9153 MAIN STREET | AUSTIN | TX | 78710 | 3 |
| 16 | 1015 | 1020 | 04-04-09 | (null) | 557 GLITTER ST. | TRENTON | NJ | 08606 | 2 |
| 17 | 1016 | 1003 | 04-04-09 | (null) | 9901 SEMINOLE WAY | TALLAHASSEE | FL | 32307 | 2 |
| 18 | 1017 | 1015 | 04-04-09 | 05-04-09 | 887 HOT ASPHALT ST | MIAMI | FL | 33222 | 3 |
| 19 | 1018 | 1001 | 05-04-09 | (null) | 95812 HIGHWAY 98 | EASTPOINT | FL | 32328 | (null) |
| 20 | 1019 | 1018 | 05-04-09 | (null) | 1008 GRAND AVENUE | MACON | GA | 31206 | 2 |

3. Save the changes permanently to the database.

Answer.

COMMIT;

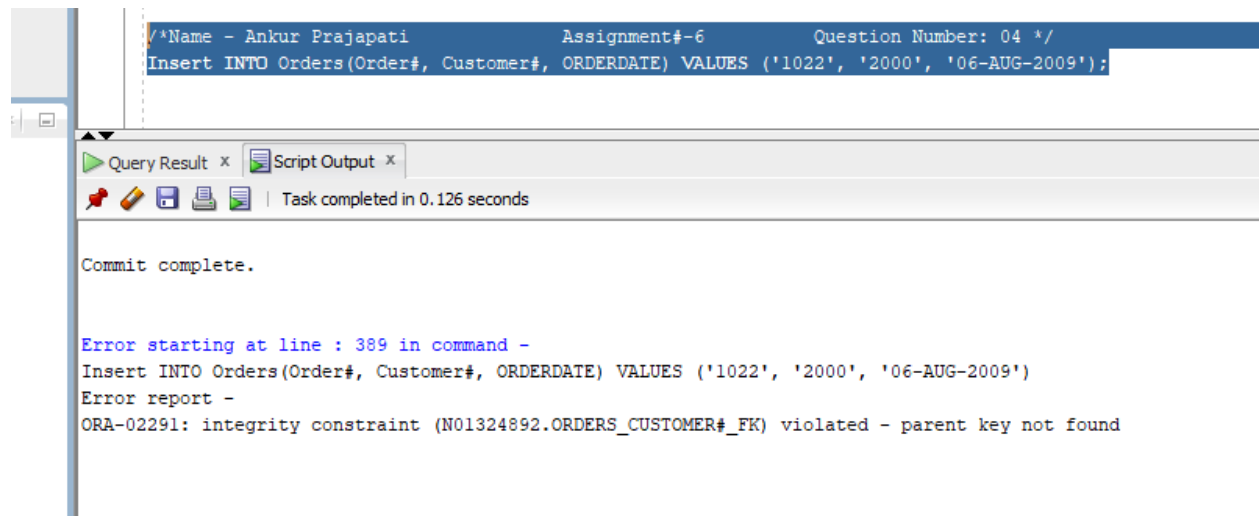


The screenshot shows the SQL Developer interface. The top bar indicates the user is 'Ankur Prajapati' on 'Assignment#-6' and the 'Question Number' is '03'. The SQL editor contains the following commands: `COMMIT;`, `DESC orders;`, and `SELECT * FROM orders;`. Below the editor, the 'Query Result' and 'Script Output' tabs are visible. The 'Script Output' tab shows the message 'Commit complete.' and a status bar indicates 'Task completed in 0.211 seconds'.

4. Add a new row in the ORDERS table with the following data: Order# = 1022, Customer# = 2000, and Order date = August 6, 2009. Describe the error raised and what caused the error.

Answer.

Insert INTO Orders(Order#, Customer#, ORDERDATE) VALUES ('1022', '2000', '06-AUG-2009'); GIVES AN ERROR.



The screenshot shows the SQL Developer interface for 'Question Number: 04'. The SQL editor contains the command: `Insert INTO Orders(Order#, Customer#, ORDERDATE) VALUES ('1022', '2000', '06-AUG-2009');`. The 'Script Output' tab shows the message 'Commit complete.' and a status bar indicates 'Task completed in 0.126 seconds'. Below this, an error report is displayed: 'Error starting at line : 389 in command - Insert INTO Orders(Order#, Customer#, ORDERDATE) VALUES ('1022', '2000', '06-AUG-2009') Error report - ORA-02291: integrity constraint (N01324892.ORDERS_CUSTOMER#_FK) violated - parent key not found'.

Error Report:

ORA-02291: integrity constraint (N01324892.ORDERS_CUSTOMER#_FK) violated - parent key not found

Error raised because our Foreign key value has no matching primary key value. To add this new row we have to add matching key for this foreign key or we should delete the foreign key.

5. Add a new row in the ORDERS table with the following data: Order# = 1023 and Customer# = 1009. Describe the error raised and what caused the error.

Answer.

INSERT INTO ORDERS (Order#, customer#)VALUES ('1023', '1009'); GIVES AN ERROR.

```
/*Name - Ankur Prajapati      Assignment#-6      Question Number: 05 */
INSERT INTO ORDERS (Order#, customer#)VALUES ('1023', '1009');

UPDATE books SET cost = '&cost' WHERE ISBN = '&ISBN';

Query Result x Script Output x
Task completed in 0.171 seconds

Commit complete.

Error starting at line : 389 in command -
Insert INTO Orders(Order#, Customer#, ORDERDATE) VALUES ('1022', '2000', '06-AUG-2009')
Error report -
ORA-02291: integrity constraint (N01324892.ORDERS_CUSTOMER#_FK) violated - parent key not found

Error starting at line : 391 in command -
INSERT INTO ORDERS (Order#, customer#)VALUES ('1023', '1009')
Error report -
ORA-01400: cannot insert NULL into ("N01324892"."ORDERS"."ORDERDATE")
```

Error Report:

ORA-01400: cannot insert NULL into ("N01324892"."ORDERS"."ORDERDATE")

Error Raised because we are trying to insert NULL into already listed objects. These objects can not accepts NULL values. We must have define orderdate column as NOT NULL. If we define a particular column NOT NULL then we have to put some value in each time we add a line.

6. Create a script using substitution variables that allows a user to set a new cost amount for a book based on the ISBN.

Answer.

UPDATE books SET cost = '&cost' WHERE ISBN = '&ISBN';

```
/*Name - Ankur Prajapati      Assignment#-6      Question Number: 06 */
UPDATE books SET cost = '&cost' WHERE ISBN = '&ISBN';

Rollback;

Query Result x Script Output x
ScriptRunner Task

Commit complete.

Error starting at line : 389 in
Insert INTO Orders(Order#, Custo
Error report -
ORA-02291: integrity constraint

Error starting at line : 391 in command -
INSERT INTO ORDERS (Order#, customer#)VALUES ('1023', '1009')
Error report -
ORA-01400: cannot insert NULL into ("N01324892"."ORDERS"."ORDERDATE")
```

Enter Substitution Variable

Enter value for cost:

OK Cancel

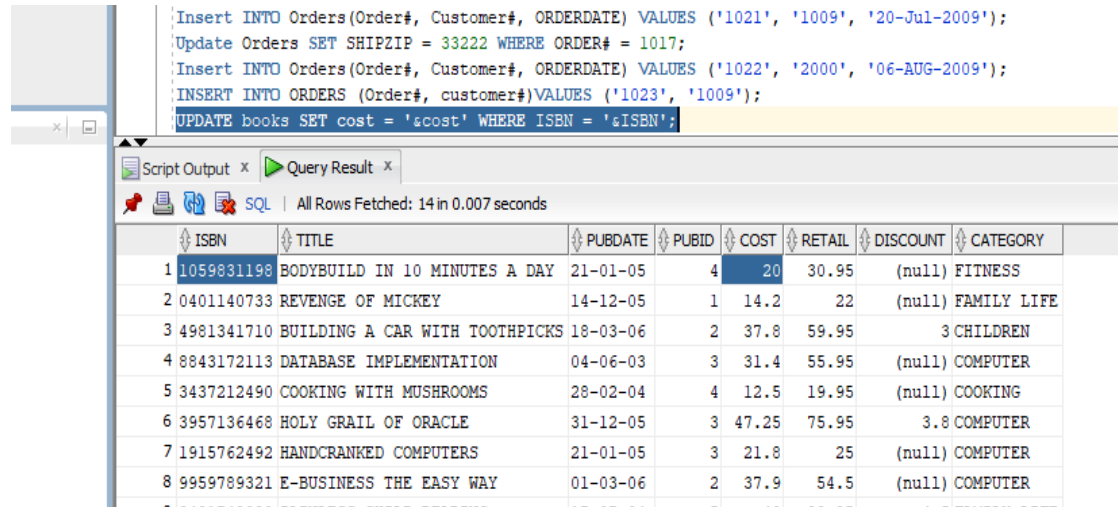
Note: It will prompt a window to add cost followed by ISBN number of book.

7. Execute the script and set the following values: isbn = 1059831198 and cost = \$20.00.

Answer.

UPDATE books SET cost = '&cost' WHERE ISBN = '&ISBN';

Insert isbn = 1059831198 and cost = \$20.00.



```

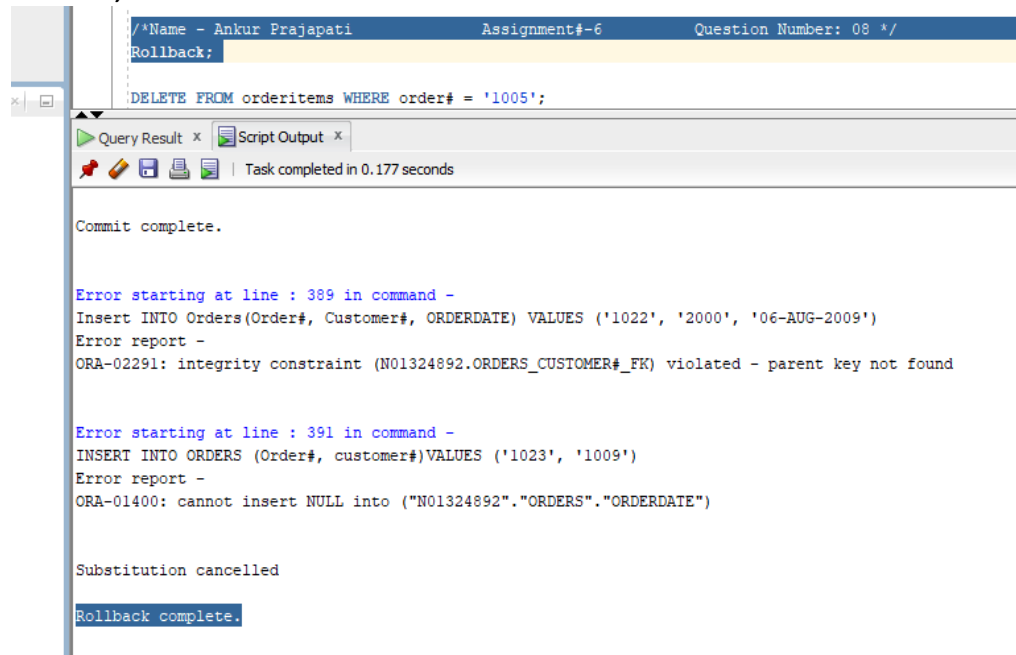
Insert INTO Orders(Order#, Customer#, ORDERDATE) VALUES ('1021', '1009', '20-Jul-2009');
Update Orders SET SHIPZIP = 33222 WHERE ORDER# = 1017;
Insert INTO Orders(Order#, Customer#, ORDERDATE) VALUES ('1022', '2000', '06-AUG-2009');
INSERT INTO ORDERS (Order#, customer#)VALUES ('1023', '1009');
UPDATE books SET cost = '&cost' WHERE ISBN = '&ISBN';
  
```

| ISBN | TITLE | PUBDATE | PUBID | COST | RETAIL | DISCOUNT | CATEGORY |
|------------|--------------------------------|----------|-------|-------|--------|----------|--------------|
| 1059831198 | BODYBUILD IN 10 MINUTES A DAY | 21-01-05 | 4 | 20 | 30.95 | (null) | FITNESS |
| 0401140733 | REVENGE OF MICKEY | 14-12-05 | 1 | 14.2 | 22 | (null) | FAMILY LIFE |
| 4981341710 | BUILDING A CAR WITH TOOTHPICKS | 18-03-06 | 2 | 37.8 | 59.95 | | 3 CHILDREN |
| 8843172113 | DATABASE IMPLEMENTATION | 04-06-03 | 3 | 31.4 | 55.95 | (null) | COMPUTER |
| 3437212490 | COOKING WITH MUSHROOMS | 28-02-04 | 4 | 12.5 | 19.95 | (null) | COOKING |
| 3957136468 | HOLY GRAIL OF ORACLE | 31-12-05 | 3 | 47.25 | 75.95 | | 3.8 COMPUTER |
| 1915762492 | HANDCRANKED COMPUTERS | 21-01-05 | 3 | 21.8 | 25 | (null) | COMPUTER |
| 9959789321 | E-BUSINESS THE EASY WAY | 01-03-06 | 2 | 37.9 | 54.5 | (null) | COMPUTER |

8. Execute a command that undoes the change in Step 7.

Answer.

Rollback;



```

/*Name - Ankur Prajapati      Assignment#-6      Question Number: 08 */
Rollback;
DELETE FROM orderitems WHERE order# = '1005';
  
```

Commit complete.

Error starting at line : 389 in command -
 Insert INTO Orders(Order#, Customer#, ORDERDATE) VALUES ('1022', '2000', '06-AUG-2009')
 Error report -
 ORA-02291: integrity constraint (N01324892.ORDERS_CUSTOMER#_FK) violated - parent key not found

Error starting at line : 391 in command -
 INSERT INTO ORDERS (Order#, customer#)VALUES ('1023', '1009')
 Error report -
 ORA-01400: cannot insert NULL into ("N01324892"."ORDERS"."ORDERDATE")

Substitution cancelled

Rollback complete.

9. Delete Order# 1005. You need to address both the master order record and the related detail records.

Answer.

DELETE FROM orderitems WHERE order# = '1005';

DELETE FROM orders WHERE order# = '1005';

```
Rollback;

/*Name - Ankur Prajapati      Assignment#-6      Question Number: 09 */
DELETE FROM orderitems WHERE order# = '1005';
DELETE FROM orders WHERE order# = '1005';

Query Result x Script Output x
Task completed in 1.602 seconds

Insert INTO Orders(Order#, Customer#, ORDERDATE) VALUES ('1022', '2000', '06-AUG-2009')
Error report -
ORA-02291: integrity constraint (N01324892.ORDERS_CUSTOMER#_FK) violated - parent key not found

Error starting at line : 391 in command -
INSERT INTO ORDERS (Order#, customer#)VALUES ('1023', '1009')
Error report -
ORA-01400: cannot insert NULL into ("N01324892"."ORDERS"."ORDERDATE")

Substitution cancelled

Rollback complete.

1 row deleted.

1 row deleted.
```

10. Execute a command that undoes the previous deletion.

Answer.

Rollback;

```
/*Name - Ankur Prajapati      Assignment#-6      Question Number: 10 */
Rollback;

Query Result x Script Output x
Task completed in 0.149 seconds

Error starting at line : 391 in command -
INSERT INTO ORDERS (Order#, customer#)VALUES ('1023', '1009')
Error report -
ORA-01400: cannot insert NULL into ("N01324892"."ORDERS"."ORDERDATE")

Substitution cancelled

Rollback complete.

1 row deleted.

1 row deleted.

Rollback complete.
```