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LAB 2 DML Part 1

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Course Code	SECD2523
Course Name	Database
Section	08

Section 6 Lesson 4 Exercise 1

Part 1 : Running a script to populate the tables.

You have to consider the order of the tables when populating them. A table that has a foreign key field cannot be populated before the related table with the primary key.

1. Use the table mapping document and list the order that you would use to populate the tables.

- a) inventory_list
- b) items
- c) price_history
- d) sales_representatives
- e) sales_rep_addresses
- f) teams
- g) customers
- h) customers_addresses
- i) orders
- j) ordered_items

Number ↑	Elapsed	Statement	Feedback	Rows
1	0.05	CREATE TABLE inventory_list (id VARCHAR2(12) CONSTRAINT	Table created.	0
2	0.02	CREATE TABLE items (itm_number VARCHAR2(12) CONSTRAINT	Table created.	0
3	0.02	CREATE TABLE price_history (start_date DATE NOT NULL,	Table created.	0
4	0.02	CREATE TABLE sales_representatives (id VARCHAR2(5) CONS	Table created.	0
5	0.02	CREATE TABLE sales_rep_addresses (id VARCHAR2(5) CONSTR	Table created.	0
6	0.02	CREATE TABLE teams (id VARCHAR2(5) CONSTRAINT pk_teams	Table created.	0
7	0.03	CREATE TABLE customers (ctr_number VARCHAR2(8) CONSTRAI	Table created.	0
8	0.03	CREATE TABLE customers_addresses (id VARCHAR2(8) CONSTR	Table created.	0
9	0.02	CREATE TABLE orders (id VARCHAR2(10) CONSTRAINT pk_orde	Table created.	0
10	0.02	CREATE TABLE ordered_items (quantity_ordered NUMBER(10)	Table created.	0
Download				
row(s) 1 - 10 of 10				
10		10	0	
Statements Processed		Successful	With Errors	

2. Open the “sports data.sql” and look at the order the data is being added there, does your list match? This file can be found in the Section 6 Lesson 4 interaction (sports data.zip) and must first be extracted.

Yes. The list is matched.

3. Run the “sports data.sql” script in APEX to populate your tables.

4. Check that no errors occurred when you ran the script.

Number ↑	Elapsed	Statement	Feedback	Rows
1	0.02	INSERT INTO inventory_list (id, cost, units) VALUES('0101023	1 row(s) inserted.	1
2	0.00	INSERT INTO inventory_list (id, cost, units) VALUES('0101023	1 row(s) inserted.	1
3	0.00	INSERT INTO inventory_list (id, cost, units) VALUES('0101023	1 row(s) inserted.	1
4	0.00	INSERT INTO inventory_list (id, cost, units) VALUES('0101023	1 row(s) inserted.	1
5	0.00	INSERT INTO inventory_list (id, cost, units) VALUES('0101023	1 row(s) inserted.	1
6	0.03	INSERT INTO items (itm_number, name, description, category,	1 row(s) inserted.	1
7	0.01	INSERT INTO items (itm_number, name, description, category,	1 row(s) inserted.	1
8	0.00	INSERT INTO items (itm_number, name, description, category,	1 row(s) inserted.	1
9	0.00	INSERT INTO items (itm_number, name, description, category,	1 row(s) inserted.	1
10	0.01	INSERT INTO items (itm_number, name, description, category,	1 row(s) inserted.	1
11	0.01	INSERT INTO price_history (start_date, start_time, price, it	1 row(s) inserted.	1
12	0.01	INSERT INTO price_history (start_date, start_time, price, en	1 row(s) inserted.	1
13	0.00	INSERT INTO price_history (start_date, start_time, price, en	1 row(s) inserted.	1
14	0.00	INSERT INTO price_history (start_date, start_time, price, it	1 row(s) inserted.	1
15	0.00	INSERT INTO price_history (start_date, start_time, price, it	1 row(s) inserted.	1
Download				
row(s) 1 - 15 of 47 Next ▶				
47		47	0	
Statements Processed		Successful	With Errors	

Part 2- Inserting rows to the system

1. Add a new team to the system

id	name	Number_of_players	discount
t004	Jets	10	5

```
INSERT INTO teams(id, name, number_of_players, discount)
VALUES('t004', 'Jets', 10, 5);
```

2. Add a new Customer with the following details to the system

ctr number	email	First name	Last name	Phone number	Current balance	Loyalty card number	tem id	sre id
c02001	brianrog@hoootech.com	Brian	Rogers	01654564898	-5	lc4587		

```
INSERT INTO customers(ctr_number,email, first_name, last_name, phone_number, current_balance, loyalty_card_number)
VALUES('c02001', 'brianrog@hoootech.com', 'Brian', 'Rogers', '01654564898', -5, 'lc4587');
```

Explain Describe Saved SQL History

ORA-02290: check constraint (HKSP_JACKY0716.MIN_CURR_BALANCE) violated

3. This information violates the check constraint that the current balance must not be less than zero. Change the current balance to 50 and rerun the query.

```
INSERT INTO customers(ctr_number,email, first_name, last_name, phone_number, current_balance, loyalty_card_number)
VALUES('c02001', 'brianrog@hoootech.com', 'Brian', 'Rogers', '01654564898', 50, 'lc4587');
```

	CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	TEM_ID	LOYALTY_CARD_NUM
	c00001	bob.thornberry@...	Robert	Thornberry	01234567898	150	sr01	t001	
	c00012	J.jones@freemail...	Jennifer	Jones	01505214598	0			lc1015
	c00101	unknown@here.c...	John	Doe	03216547808	9875	sr01	t002	
	c00103	MurciaA@globalt...	Andrew	Murcia	07715246890	85			lc2341
	c01986	margal87@delphi...	Maria	Galant	01442736589	125.65	sr03	t003	
	c02001	brianrog@hoootec...	Brian	Rogers	01654564898	50			lc4587

Section 6 Lesson 4 Exercise 2: Data Manipulation Language

Part 1- Updating rows to the system

1. Run the following query to view the content of the price_history table:

```
SELECT start_date, TO_CHAR (start_time, 'HH24:MI:SS'), price, end_date,  
TO_CHAR (end_time, 'HH24:MI')  
FROM price_history;
```

```
11 SELECT start_date, TO_CHAR (start_time, 'HH24:MI:SS'), price, end_date, TO_CHAR (end_time, 'HH24:MI')
12 FROM price_history;
```

START_DATE	TO_CHAR(START_TIME,'HH24:MI:SS')	PRICE	END_DATE	TO_CHAR(END_TIME,'HH24:MI')
06/17/2017	09:00:00	4.99	-	-
11/25/2016	09:00:00	14.99	01/25/2017	17:00
01/25/2017	17:01:00	8.99	01/25/2017	19:00
01/26/2017	09:00:00	15.99	-	-
02/12/2017	12:30:00	7.99	-	-
04/25/2017	10:10:10	24.99	-	-
05/31/2017	16:35:30	149	-	-

2. Obl is going to update the price of the premium bat so you will need to write a query that will close off the current price by adding the system date values to the end_date and end_time fields. To run this query you will need to both match the item number and identify that the end date is null. This ensures that you are updating the latest price.

```
UPDATE price_history
SET end_date = SYSDATE,
    end_time = CURRENT_TIMESTAMP
WHERE itm_number = 'im01101048'
AND end_date IS NULL;
```

3. Rerun the select statement on the price_history table to ensure that the statement has been executed.

START_DATE	TO_CHAR(START_TIME,'HH24:MI:SS')	PRICE	END_DATE	TO_CHAR(END_TIME,'HH24:MI')
06/17/2017	09:00:00	4.99	-	-
11/25/2016	09:00:00	14.99	01/25/2017	17:00
01/25/2017	17:01:00	8.99	01/25/2017	19:00
01/26/2017	09:00:00	15.99	-	-
02/12/2017	12:30:00	7.99	-	-
04/25/2017	10:10:10	24.99	-	-
05/31/2017	16:35:30	149	12/16/2023	10:12

4. Insert a new row that will use the current date and time to set the new price of the premium bat to be 99.99.

```
INSERT INTO price_history(start_date, start_time, price, itm_number)
VALUES(SYSDATE, CURRENT_TIMESTAMP, 99.99, 'im01101048');
```

5. Rerun the select statement on the price_history table to ensure that the statement has been executed.

START_DATE	TO_CHAR(START_TIME,'HH24:MI:SS')	PRICE	END_DATE	TO_CHAR(END_TIME,'HH24:MI:SS')
06/17/2017	09:00:00	4.99	-	-
11/25/2016	09:00:00	14.99	01/25/2017	17:00
01/25/2017	17:01:00	8.99	01/25/2017	19:00
01/26/2017	09:00:00	15.99	-	-
02/12/2017	12:50:00	7.99	-	-
04/25/2017	10:10:10	24.99	-	-
05/31/2017	16:35:50	149	12/16/2023	10:12
12/16/2023	10:14:52	99.99	-	-

Part 2: Deleting rows from the system

1. Bob Thornberry has contacted Obl to ask that the 83 Barrhill Drive address be removed from the system as he can no longer receive parcels at this address. Write a SQL statement that will remove this address from the system.

```
DELETE FROM customers_addresses
WHERE address_line_1 = '83 Barrhill Drive';
```

```
DELETE FROM customers_addresses
WHERE address_line_1 = '83 Barrhill Drive';
```

2. Run a select statement on the customers_addresses table to ensure that the statement has been executed

```
SELECT * FROM customers_addresses
```

ID	ADDRESS_LINE_1	ADDRESS_LINE_2	CITY	ZIP_CODE	CTR_NUMBER
ca0102	17 Gartsquare Road	Starford	Liverpool	LP89JHK	c00001
ca0103	54 Ropehill Crescent	Georgetown	Star	ST45AGV	c00101
ca0104	36 Watercress Lane	-	Jump	JP25YTH	c01986
ca0105	63 Acacia Drive	Skins	Liverpool	LP83JHR	c00001