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SECD2523
SECTION 10

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PROJECT TITLE:
SQL LAB2
(DML1)
PART1

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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.

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 SecDon 6 Lesson 4 interacDon (sports data.zip) and must first be extracted. 3. Run the “sports data.sql” script in APEX to populate your tables
4. Check that no errors occurred when you ran the script.

No error has been detected.

```
1 row(s) inserted.  
1 row(s) inserted.  
1 row(s) inserted.  
1 row(s) inserted.  
1 row(s) inserted.
```

Part 2- Inser9ng rows to the system

1. Add a new team to the system

```
INSERT INTO teams VALUES ('t004','Jets',10,5);
```

ID	NAME	NUMBER_OF_PLAYERS	DISCOUNT
t001	Rockets	25	10
t002	Celtics	42	20
t003	Rovers	8	–
t004	Jets	10	5

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

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

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

```
UPDATE customers
```

CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	TEM_ID	LOYALTY_CARD_NUMBER
c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	–
c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	–	–	lc1015
c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	–
c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	–	–	lc2341
c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	–
c02001	brianrog@hootech.com	Brian	Rogers	01654564898	50	–	–	Ic4587

SET current_balance =50

WHERE ctr_number = 'c02001';

CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	TEM_ID	LOYALTY_CARD_NUMBER
c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	–
c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	–	–	lc1015
c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	–
c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	–	–	lc2341
c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	–
c02001	brianrog@hootech.com	Brian	Rogers	01654564898	50	–	–	Ic4587

Section 6 Lesson 4 Exercise 2: Data Manipulation Language

Use DML operations to manage database tables (S6L4 Objective 2)

In this exercise you will populate and work with the data that is stored in the database system.

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;
```

START_DATE	TO_CHAR(START_TIME, 'HH24:MI:SS')	PRICE	END_DATE	TO_CHAR(END_TIME, 'HH24:MI')
17-JUN-17	09:00:00	4.99	—	—
25-NOV-16	09:00:00	14.99	25-JAN-17	17:00
25-JAN-17	17:01:00	8.99	25-JAN-17	19:00
26-JAN-17	09:00:00	15.99	—	—
12-FEB-17	12:30:00	7.99	—	—
25-APR-17	10:10:10	24.99	—	—
31-MAY-17	16:35:30	149	—	—

- 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;

```
304 WHERE ctr_number = 'c02001';
305
306 ✓ SELECT start_date, TO_CHAR (start_time, 'HH24:MI:SS'), price, end_date, TO_CHAR (end_time, 'HH24:MI')
307 FROM price_history;
308
309 ✓ UPDATE price_history
310 SET end_date =SYSDATE,end_time=CURRENT_TIMESTAMP WHERE itm_number ='im01101048' AND end_date IS NULL;
311
312
```

1 row(s) updated.

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

```
SELECT*
FROM price_history;
```

START_DATE	START_TIME	PRICE	END_DATE	END_TIME	ITM_NUMBER
17-JUN-17	17-JUN-16	4.99	-	-	im01101044
25-NOV-16	25-NOV-16	14.99	25-JAN-17	25-JAN-17	im01101045
25-JAN-17	25-JAN-17	8.99	25-JAN-17	25-JAN-17	im01101045
26-JAN-17	26-JAN-17	15.99	-	-	im01101045
12-FEB-17	12-FEB-17	7.99	-	-	im01101046
25-APR-17	25-APR-17	24.99	-	-	im01101047
31-MAY-17	31-MAY-17	149	05-JAN-24	05-JAN-24	im01101048

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(itm_number,price,start_date,start_time)
VALUES('im01101048',99.9,CURRENT_DATE,CURRENT_TIMESTAMP);
```

```
311
312 ✓ INSERT INTO price_history
313 (itm_number,price,start_date,start_time)
314 VALUES('im01101048',99.9,CURRENT_DATE,CURRENT_TIMESTAMP);
315
316
```

1 row(s) inserted.

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

```
SELECT *
FROM price history;
```

START_DATE	START_TIME	PRICE	END_DATE	END_TIME	ITM_NUMBER
17-JUN-17	17-JUN-16	4.99	-	-	im01101044
25-NOV-16	25-NOV-16	14.99	25-JAN-17	25-JAN-17	im01101045
25-JAN-17	25-JAN-17	8.99	25-JAN-17	25-JAN-17	im01101045
26-JAN-17	26-JAN-17	15.99	-	-	im01101045
12-FEB-17	12-FEB-17	7.99	-	-	im01101046
25-APR-17	25-APR-17	24.99	-	-	im01101047
31-MAY-17	31-MAY-17	149	05-JAN-24	05-JAN-24	im01101048
05-JAN-24	05-JAN-24	99.9	-	-	im01101048

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 longer receive parcels at this address. Write a SQL statement that will remove this address from the system.

```
DELETE FROM customers_addresses WHERE id='ca0101';
```

```
322  
323 ✓ DELETE FROM customers_addresses  
324 WHERE id='ca0101';  
325
```

```
1 row(s) deleted.
```

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	JP23YTH	c01986
ca0105	63 Acacia Drive	Skins	Liverpool	LP83JHR	c00001