

**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	↓ insert into the tables
b) items	
c) price_history	
d) sales_representatives	
e) sales_rep_addresses	
f) teams	
g) customers	
h) customers_addresses	
i) orders	
j) ordered_items	

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, it matched

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

Number ↕	Elapsed	Statement	Feedback	Rows
1	0.01	INSERT INTO inventory_list (id, cost, units) VALUES(101023)	ORA-00001: unique constraint (WKSP_ED12345.INVENTORY_LIST_PK) violated	-
2	0.00	INSERT INTO inventory_list (id, cost, units) VALUES(101023)	ORA-00001: unique constraint (WKSP_ED12345.INVENTORY_LIST_PK) violated	-
3	0.00	INSERT INTO inventory_list (id, cost, units) VALUES(101023)	ORA-00001: unique constraint (WKSP_ED12345.INVENTORY_LIST_PK) violated	-
4	0.00	INSERT INTO inventory_list (id, cost, units) VALUES(101023)	ORA-00001: unique constraint (WKSP_ED12345.INVENTORY_LIST_PK) violated	-
5	0.00	INSERT INTO inventory_list (id, cost, units) VALUES(101023)	ORA-00001: unique constraint (WKSP_ED12345.INVENTORY_LIST_PK) violated	-
6	0.00	INSERT INTO items (itm_number, name, description, category,	ORA-00001: unique constraint (WKSP_ED12345.ITEM_PK) violated	-
7	0.01	INSERT INTO items (itm_number, name, description, category,	ORA-00001: unique constraint (WKSP_ED12345.ITEM_PK) violated	-
8	0.00	INSERT INTO items (itm_number, name, description, category,	ORA-00001: unique constraint (WKSP_ED12345.ITEM_PK) violated	-
9	0.00	INSERT INTO items (itm_number, name, description, category,	ORA-00001: unique constraint (WKSP_ED12345.ITEM_PK) violated	-
10	0.00	INSERT INTO items (itm_number, name, description, category,	ORA-00001: unique constraint (WKSP_ED12345.ITEM_PK) violated	-
11	0.01	INSERT INTO price_history (start_date, start_time, price, it	ORA-00001: unique constraint (WKSP_ED12345.PRICE_HISTORY_PK) violated	-
12	0.00	INSERT INTO price_history (start_date, start_time, price, en	ORA-00001: unique constraint (WKSP_ED12345.PRICE_HISTORY_PK) violated	-
13	0.00	INSERT INTO price_history (start_date, start_time, price, en	ORA-00001: unique constraint (WKSP_ED12345.PRICE_HISTORY_PK) violated	-
14	0.00	INSERT INTO price_history (start_date, start_time, price, it	ORA-00001: unique constraint (WKSP_ED12345.PRICE_HISTORY_PK) violated	-
15	0.00	INSERT INTO price_history (start_date, start_time, price, it	ORA-00001: unique constraint (WKSP_ED12345.PRICE_HISTORY_PK) violated	-
16	0.00	INSERT INTO price_history (start_date, start_time, price, it	ORA-00001: unique constraint (WKSP_ED12345.PRICE_HISTORY_PK) violated	-
17	0.00	INSERT INTO price_history (start_date, start_time, price, it	ORA-00001: unique constraint (WKSP_ED12345.PRICE_HISTORY_PK) violated	-
18	0.01	INSERT INTO sales_representatives (id, email, first_name, la	ORA-00001: unique constraint (WKSP_ED12345.SALES_REPRESENTATIVE_PK) violated	-
19	0.00	INSERT INTO sales_representatives (id, email, first_name, la	ORA-00001: unique constraint (WKSP_ED12345.SALES_REPRESENTATIVE_PK) violated	-
20	0.00	INSERT INTO sales_representatives (id, email, first_name, la	ORA-00001: unique constraint (WKSP_ED12345.SALES_REPRESENTATIVE_PK) violated	-
21	0.00	INSERT INTO sales_rep_addresses (id, address_line_1, address	ORA-00001: unique constraint (WKSP_ED12345.SALES_REP_ADDRESS_PK) violated	-
22	0.00	INSERT INTO sales_rep_addresses (id, address_line_1, address	ORA-00001: unique constraint (WKSP_ED12345.SALES_REP_ADDRESS_PK) violated	-
23	0.00	INSERT INTO sales_rep_addresses (id, address_line_1, address	ORA-00001: unique constraint (WKSP_ED12345.SALES_REP_ADDRESS_PK) violated	-
24	0.00	INSERT INTO teams (id, name, number_of_players, discount) VA	ORA-00001: unique constraint (WKSP_ED12345.TEAM_PK) violated	-
25	0.00	INSERT INTO teams (id, name, number_of_players, discount) VA	ORA-00001: unique constraint (WKSP_ED12345.TEAM_PK) violated	-
26	0.00	INSERT INTO teams (id, name, number_of_players, discount) VA	ORA-00001: unique constraint (WKSP_ED12345.TEAM_PK) violated	-
27	0.00	INSERT INTO customers (ctr_number, email, first_name, last_n	ORA-00001: unique constraint (WKSP_ED12345.CUSTOMER_PK) violated	-
28	0.00	INSERT INTO customers (ctr_number, email, first_name, last_n	ORA-00001: unique constraint (WKSP_ED12345.CUSTOMER_PK) violated	-
29	0.01	INSERT INTO customers (ctr_number, email, first_name, last_n	ORA-00001: unique constraint (WKSP_ED12345.CUSTOMER_PK) violated	-
30	0.00	INSERT INTO customers (ctr_number, email, first_name, last_n	ORA-00001: unique constraint (WKSP_ED12345.CUSTOMER_PK) violated	-
31	0.00	INSERT INTO customers (ctr_number, email, first_name, last_n	ORA-00001: unique constraint (WKSP_ED12345.CUSTOMER_PK) violated	-
32	0.01	INSERT INTO customers_addresses (id, address_line_1, address	ORA-00001: unique constraint (WKSP_ED12345.CUSTOMER_ADDRESS_PK) violated	-
33	0.00	INSERT INTO customers_addresses (id, address_line_1, address	ORA-00001: unique constraint (WKSP_ED12345.CUSTOMER_ADDRESS_PK) violated	-
34	0.00	INSERT INTO customers_addresses (id, address_line_1, address	ORA-00001: unique constraint (WKSP_ED12345.CUSTOMER_ADDRESS_PK) violated	-
35	0.00	INSERT INTO customers_addresses (id, address_line_1, address	ORA-00001: unique constraint (WKSP_ED12345.CUSTOMER_ADDRESS_PK) violated	-
36	0.00	INSERT INTO customers_addresses (id, address_line_1, address	ORA-00001: unique constraint (WKSP_ED12345.CUSTOMER_ADDRESS_PK) violated	-
37	0.00	INSERT INTO orders (id, odr_date, odr_time, number_of_units,	ORA-00001: unique constraint (WKSP_ED12345.ORDERS_PK) violated	-
38	0.00	INSERT INTO orders (id, odr_date, odr_time, number_of_units,	ORA-00001: unique constraint (WKSP_ED12345.ORDERS_PK) violated	-
39	0.01	INSERT INTO orders (id, odr_date, odr_time, number_of_units,	ORA-00001: unique constraint (WKSP_ED12345.ORDERS_PK) violated	-
40	0.00	INSERT INTO orders (id, odr_date, odr_time, number_of_units,	ORA-00001: unique constraint (WKSP_ED12345.ORDERS_PK) violated	-
41	0.00	INSERT INTO orders (id, odr_date, odr_time, number_of_units,	ORA-00001: unique constraint (WKSP_ED12345.ORDERS_PK) violated	-
42	0.00	INSERT INTO ordered_items (quantity_ordered, quantity_shippe	ORA-00001: unique constraint (WKSP_ED12345.ORDERED_ITEM_PK) violated	-
43	0.00	INSERT INTO ordered_items (quantity_ordered, quantity_shippe	ORA-00001: unique constraint (WKSP_ED12345.ORDERED_ITEM_PK) violated	-
44	0.00	INSERT INTO ordered_items (quantity_ordered, quantity_shippe	ORA-00001: unique constraint (WKSP_ED12345.ORDERED_ITEM_PK) violated	-
45	0.00	INSERT INTO ordered_items (quantity_ordered, quantity_shippe	ORA-00001: unique constraint (WKSP_ED12345.ORDERED_ITEM_PK) violated	-
46	0.01	INSERT INTO ordered_items (quantity_ordered, quantity_shippe	ORA-00001: unique constraint (WKSP_ED12345.ORDERED_ITEM_PK) violated	-
47	0.00	INSERT INTO ordered_items (quantity_ordered, quantity_shippe	ORA-00001: unique constraint (WKSP_ED12345.ORDERED_ITEM_PK) violated	-

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

- No errors were found when running the script.

## 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  
VALUES ('t004', 'Jets', 10, 5);
```

```
1  INSERT INTO teams  
2  VALUES ('t004', 'Jets', 10, 5);  
3
```

Results	Explain	Describe	Saved SQL	History
1 row(s) inserted.  0.01 seconds				

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@hootech.com	Brian	Rogers	01654564898	-5	lc4587		

```
5  INSERT INTO customers(  
6    ctr_number,  
7    email,  
8    first_name,  
9    last_name,  
10   phone_number,  
11   current_balance,  
12   loyalty_card_number  
13 )VALUES(  
14   'c02001',  
15   'brianrog@hootech.com',  
16   'Brian',  
17   'Rogers',  
18   '01654564898',  
19   '-5',  
20   'lc4587'  
21 );
```

Results	Explain	Describe	Saved SQL	History
ORA-02290: check constraint (WKSP_ED12345.CHECK_BALANCE) violated  0.03 seconds				

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

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.

```
5  INSERT INTO customers(
6      ctr_number,
7      email,
8      first_name,
9      last_name,
10     phone_number,
11     current_balance,
12     loyalty_card_number
13 )VALUES(
14     'c02001',
15     'brianrog@hoootech.com',
16     'Brian',
17     'Rogers',
18     '01654564898',
19     '50',
20     'lc4587'
21 );
```

Results	Explain	Describe	Saved SQL	History
1 row(s) inserted.				
0.01 seconds				

```
- 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'
);
```

### 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;
```

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

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

7 rows returned in 0.04 seconds [Download](#)

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 = SYSDATE  
WHERE itm\_number = 'im01101048' AND end\_date IS NULL;

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

Results	Explain	Describe	Saved SQL	History
1 row(s) updated.				
0.03 seconds				

3. Rerun the select statement on the price\_history table to ensure that the statement has been executed.

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

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

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

7 rows returned in 0.01 seconds [Download](#)

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, SYSDATE, 99.99, 'im01101048');
```

```
34 INSERT INTO price_history(start_date, start_time, price, itm_number)  
35 VALUES(SYSDATE, SYSDATE, 99.99, 'im01101048');  
36
```

Results	Explain	Describe	Saved SQL	History
1 row(s) inserted.				
0.01 seconds				

5. Rerun the select statement on the price\_history table to ensure that the statement has been executed.

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

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

START_DATE	TO_CHAR(START_TIME,'HH24:MI:SS')	PRICE	END_DATE	TO_CHAR(END_TIME,'HH24:MI')
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
02/12/2017	12:30:00	7.99	-	-
11/09/2023	12:39:58	99.99	-	-
01/26/2017	09:00:00	15.99	-	-
04/25/2017	10:10:10	24.99	-	-
06/11/2017	09:00:00	4.99	-	-
05/31/2017	16:35:30	149	11/09/2023	12:19

8 rows returned in 0.01 seconds [Download](#)

## 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';
```

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

Results	Explain	Describe	Saved SQL	History
---------	---------	----------	-----------	---------

1 row(s) deleted.

0.03 seconds

2. Run a select statement on the customers\_addresses table to ensure that the statement has been executed.

*-SELECT \* FROM customers\_addresses;*

44SELECT \* FROM customers\_addresses;

Results

ExplainDescribeSaved SQLHistory

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

4 rows returned in 0.02 secondsDownload