



# UTM

UNIVERSITI TEKNOLOGI MALAYSIA

**DATABASE**

**SECD 2523 (SECTION 03)**

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**LAB 2**

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## Database Design Project

### Oracle Baseball League Store Database

#### Project Scenario:

You are a small consulting company specializing in database development. You have just been awarded the contract to develop a data model for a database application system for a small retail store called Oracle Baseball League (OBL).

The Oracle Baseball League store serves the entire surrounding community selling baseball kit. The OBL has two types of customer, there are individuals who purchase items like balls, cleats, gloves, shirts, screen printed t-shirts, and shorts. Additionally customers can represent a team when they purchase uniforms and equipment on behalf of the team.

Teams and individual customers are free to purchase any item from the inventory list, but teams get a discount on the list price depending on the number of players. When a customer places an order we record the order items for that order in our database.

OBL has a team of three sales representatives that officially only call on teams but have been known to handle individual customer complaints.

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

## Part 1 : Running a script to populate the tables.

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 Section 6 Lesson 4 interaction (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.

3	0.00	INSERT INTO inventory_list (id, cost, units) VALUES('il01023	1 row(s) inserted.	1
4	0.01	INSERT INTO inventory_list (id, cost, units) VALUES('il01023	1 row(s) inserted.	1
5	0.00	INSERT INTO inventory_list (id, cost, units) VALUES('il01023	1 row(s) inserted.	1
6	0.01	INSERT INTO items (itm_number, name, description, category,	1 row(s) inserted.	1
7	0.00	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	0.00	INSERT INTO items (itm_number, name, description, category,	1 row(s) inserted.	1
11	0.02	INSERT INTO price_history (start_date, start_time, price, it	1 row(s) inserted.	1
12	0.00	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

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47

Statements Processed

47

Successful

0

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

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SQL ScriptsScript Editor

Script Name: sports\_data.sql

CancelDownloadDeleteSaveRun

```
130 INSERT INTO ordered_items (quantity_ordered, quantity_shipped, odr_id, itm_number)
131 VALUES(5, 5, 'or0101250', 'im01101044');
132
133 INSERT INTO ordered_items (quantity_ordered, quantity_shipped, odr_id, itm_number)
134 VALUES(5, 5, 'or0101250', 'im01101046');
135
136 INSERT INTO ordered_items (quantity_ordered, quantity_shipped, odr_id, itm_number)
137 VALUES(5, 5, 'or0101350', 'im01101044');
138
139 INSERT INTO ordered_items (quantity_ordered, quantity_shipped, odr_id, itm_number)
140 VALUES(18, 18, 'or0101425', 'im01101047');
141
142 INSERT INTO ordered_items (quantity_ordered, quantity_shipped, odr_id, itm_number)
143 VALUES(10, 10, 'or0101681', 'im01101047');
144
145 INSERT INTO ordered_items (quantity_ordered, quantity_shipped, odr_id, itm_number)
146 VALUES(1, 1, 'or0101750', 'im01101048');
147
148 INSERT INTO teams(id, name, number_of_players, discount)
149 VALUES ('t004', 'Jets', 10, 5);
150
151
152
```

my\_a264\_sql\_s06my\_a264\_sql\_s06enCopyright © 1999, 2019, Oracle. All rights reserved.Application Express 19.1.0.0.15

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Object Browser

Schema

MY\_A264\_SQL\_S06

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Tables

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CUSTOMERS

CUSTOMERS\_ADDRESSES

INVENTORY\_LIST

ITEMS

ORDERED\_ITEMS

ORDERS

PRICE\_HISTORY

SALES\_REPRESENTATIVES

SALES\_REP\_ADDRESSES

**TEAMS**

TEAMS

Table

Data

Indexes

Model

Constraints

Grants

Statistics

UI Defaults

Triggers

Dependencies

SQL

REST

Query

Count Rows

Insert Row

Data

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

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row(s) 1 - 4 of 4

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📄 mv\_a264.sql.s06

🌐 en

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## 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		

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SQL Scripts | Script Editor

Script Name: sports data.sql

Cancel Download Delete Save Run

```

135
136 INSERT INTO ordered_items (quantity_ordered, quantity_shipped, odr_id, itm_number)
137 VALUES(5, 5, 'or0101350', 'im01101044');
138
139 INSERT INTO ordered_items (quantity_ordered, quantity_shipped, odr_id, itm_number)
140 VALUES(18, 18, 'or0101425', 'im01101047');
141
142 INSERT INTO ordered_items (quantity_ordered, quantity_shipped, odr_id, itm_number)
143 VALUES(10, 10, 'or0101681', 'im01101047');
144
145 INSERT INTO ordered_items (quantity_ordered, quantity_shipped, odr_id, itm_number)
146 VALUES(1, 1, 'or0101750', 'im01101048');
147
148 INSERT INTO teams(id, name, number_of_players, discount)
149 VALUES ('t004', 'Jets', 10, 5);
150
151 INSERT INTO customers(ctr_number, email, first_name, last_name, phone_number, current_balance, loyalty_card_number)
152 VALUES ('c02001', 'brianrog@hoootech.com', 'Brian', 'Rogers', '01654564898', -5, 'lc4587');
153
154
155
156
157

```

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Object Browser

Schema: MY\_A264\_SQL\_S06

Tables

CUSTOMERS

CUSTOMERS\_ADDRESSES

INVENTORY\_LIST

ITEMS

ORDERED\_ITEMS

ORDERS

PRICE\_HISTORY

SALES\_REPRESENTATIVES

SALES\_REP\_ADDRESSES

TEAMS

CUSTOMERS

Table Data Indexes Model Constraints Grants Statistics UI Defaults Triggers Dependencies SQL REST

Query Count Rows Insert Row

EDIT	CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	TEM_ID	LOYALTY
	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	Galan	01442736589	125.65	sr03	t003	-
	c02001	brianrog@hoootech.com	Brian	Rogers	01654564898	-5	-	-	lc4587

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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.

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SQL Scripts \ Script Editor

Script Name: sports\_data.sql

```
137 VALUES(5, 5, 'or0101350', 'im01101044');
138
139 INSERT INTO ordered_items (quantity_ordered, quantity_shipped, odr_id, itm_number)
140 VALUES(10, 10, 'or0101425', 'im01101047');
141
142 INSERT INTO ordered_items (quantity_ordered, quantity_shipped, odr_id, itm_number)
143 VALUES(10, 10, 'or0101681', 'im01101047');
144
145 INSERT INTO ordered_items (quantity_ordered, quantity_shipped, odr_id, itm_number)
146 VALUES(1, 1, 'or0101750', 'im01101048');
147
148 INSERT INTO teams(id, name, number_of_players, discount)
149 VALUES ('t004', 'Jets', 10, 5);
150
151 INSERT INTO customers(ctr_number, email, first_name, last_name, phone_number, current_balance, loyalty_card_number)
152 VALUES ('c02001', 'brianrog@hoootech.com', 'Brian', 'Rogers', '01654564898', -5, 'lc4587');
153
154 UPDATE customers
155 SET current_balance = 50
156 WHERE current_balance < 0;
157
```

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Object Browser

Schema: MY\_A264\_SQL\_S06

Tables: CUSTOMERS

	EDIT	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@hoootech.com	Brian	Rogers	01654564898	50	-	-	lc4587

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