

Database Lab2:DML1

SECD2523 – 08 Database Semester 1 2023/2024

CHUAH KEE YONG A22EC0150

Lecturer's Name: Dr. Noor Hidayah Zakaria

Section 6 Lesson 4 Exercise 1: 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 tables.

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.

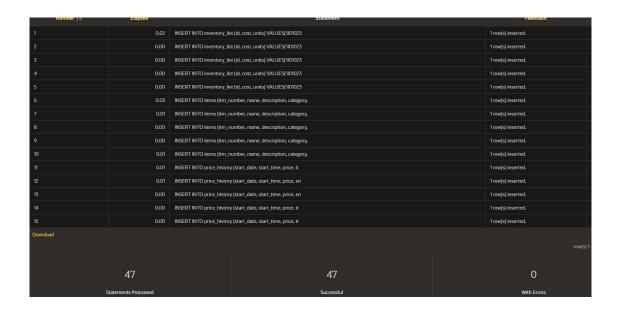
- 1. Use the table mapping document and list the order that you would use to populate the tables.
 - 1) inventory list
 - 2) items
 - 3) price_history
 - 4) sales_representatives
 - 5) sales_rep_addresses
 - 6) teams
 - 7) customers
 - 8) customers addresses
 - 9) orders
 - 10) ordered items



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.

Yup

- 3. Run the "sports data.sql" script in APEX to populate your tables
- 4. Check that no errors occurred when you ran 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	

```
1   INSERT INTO teams(id,name,number_of_players,discount)
2   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@hoote ch.com	Brian	Rogers	01654564898	-5	lc4587		

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

Results Explain Describe Saved SQL History

ORA-02290: check constraint (WKSP_CHUAHYONG.MIN_CURRENT_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.

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

Copyright © 2020, Oracle and/or its affiliates. All rights reserved. Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Section 6 Lesson 4 Exercise 2: Data Manipulation Language

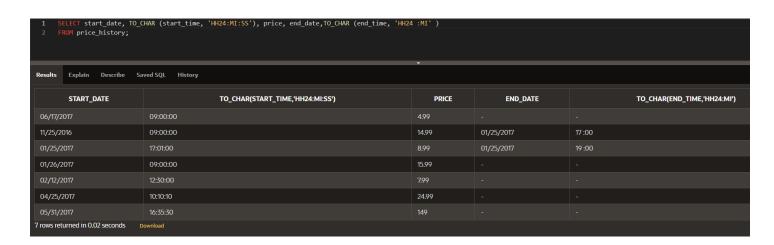
Use DML operations to manage database tables (S6L4 Objective 2)

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 guery 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;
```



2. Oblis 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.

```
1  UPDATE price_history
2  SET end_date = sysdate, end_time = sysdate
3  WHERE itm_number='im01101048'AND end_date IS NULL;
```

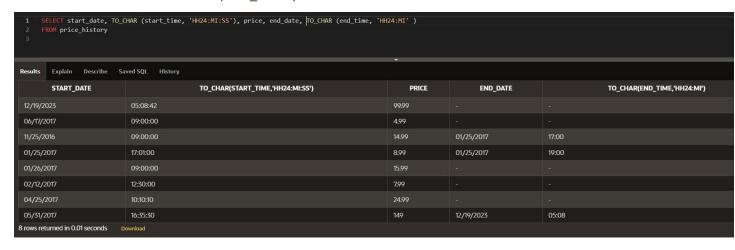
3. Rerun the select statement on the price_history table to ensure that the statement has been executed.

1	1 SELECT start_date, TO_CHAR (start_time, 'HH24:MI:SS'), price, end_date,TO_CHAR (end_time, 'HH24 :MI')								
2	2 FROM price_history;								
			· •						
Results	Explain Describe Sa	aved SQL History							
	CTART DATE	TO CHARGEART THAT HUDGANISCO	DDICE	FAID DATE	TO CHARGEND TIME HUIDANIN				
	START_DATE	TO_CHAR(START_TIME,'HH24:MI:SS')	PRICE	END_DATE	TO_CHAR(END_TIME,'HH24:MI')				
04 47	(2017	00-00-00	4.99						
06/17	/201/	09:00:00	4.99						
11/25/	/2016	09:00:00	14.99	01/25/2017	17:00				
, 23,				0.72572011					
01/25	/2017	17:01:00	8.99	01/25/2017	19:00				
01/26	/2017	09:00:00	15.99						
02.42	/2017	17.70.00	700						
02/12	/201/	12:30:00	7.99						
04/25	5/2017	10:10:10	24.99						
0-1/2.	72017	10.10.10	23.77						
05/31	/2017	16:35:30	149	12/19/2023	05:08				
/ rows r	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.

```
1 INSERT INTO price_history (start_date, start_time, price, itm_number)
2 VALUES (SYSDATE, SYSDATE, 99.99, 'im01101048');
3
```

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



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'
3
```

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

