

SECD 2523 – DATABASE

Lab 4: Data Manipulation Language (DML) 3

Subject Name: Database

Subject Code: SECD2523

Semester: 1 - 2023/24

Lab Title: Data Manipulation Language(DML)

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Date of Submission: 17 December 2023

Lecturer Name: Dr Noor Hidayah Binti Zakaria

DML 3 Part 1

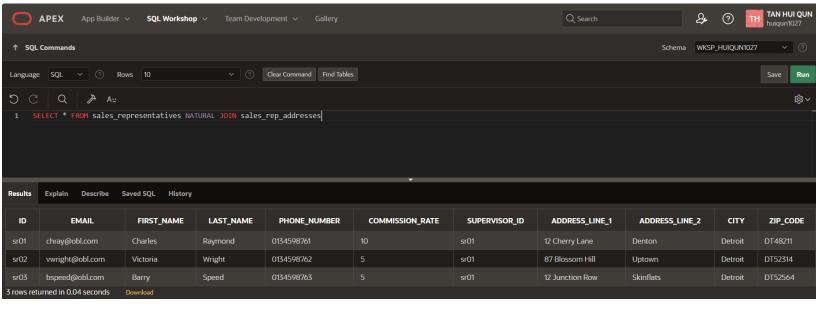
Section 6 Lesson 9 Exercise 1: Joining Tables Using JOIN

Write SELECT Statements Using Data From Multiple Tables Using Equijoins and Non-Equijoins (S6L9 Objective 1)

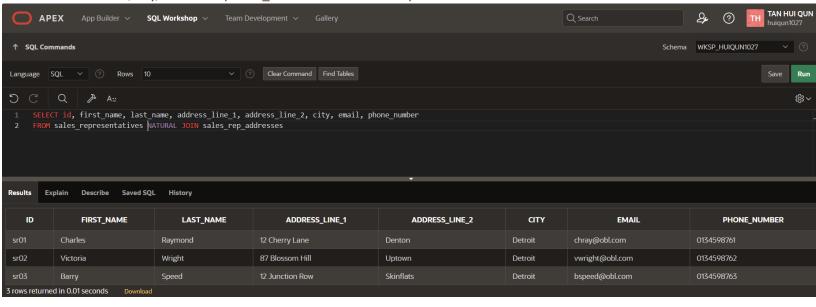
In this exercise you will write SELECT statements to access data from more than one table.

Part 1: Creating Natural Joins.

1. Display all of the information about sales representatives and their addresses using a natural join.

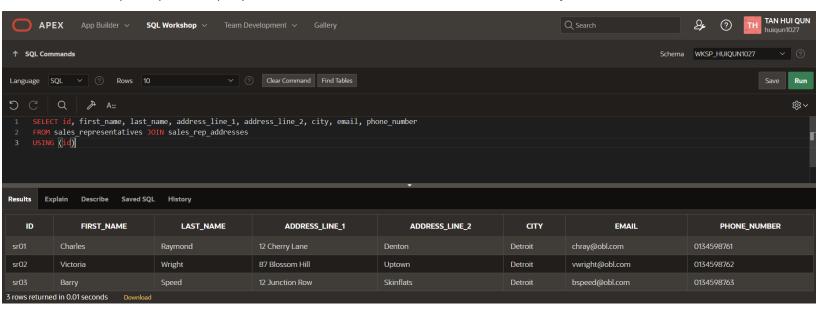


2. Adapt the query from the previous question to only show the id, first name, last name, address line 1, address line 2, city, email and phone number for the sales representatives.

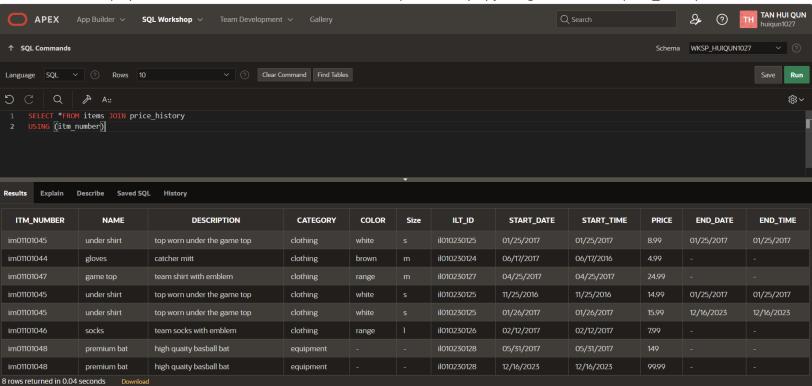


Part 2: Creating Joins with the USING Clause

1. Adapt the previous query answer to use the USING clause instead of a natural join.

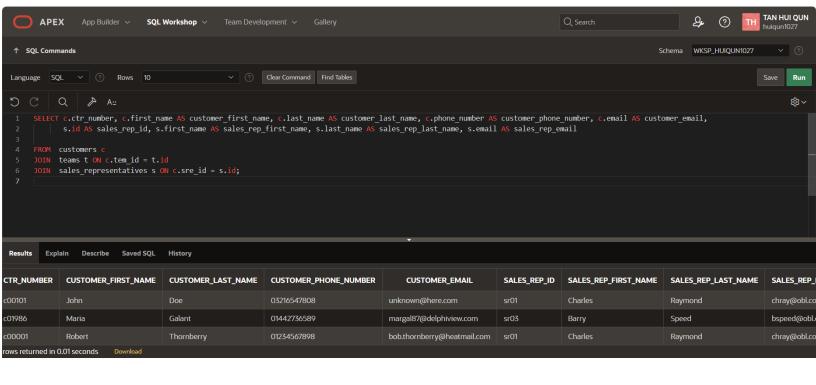


2. Display all of the information about items and their price history by joining the items and price_history tables.



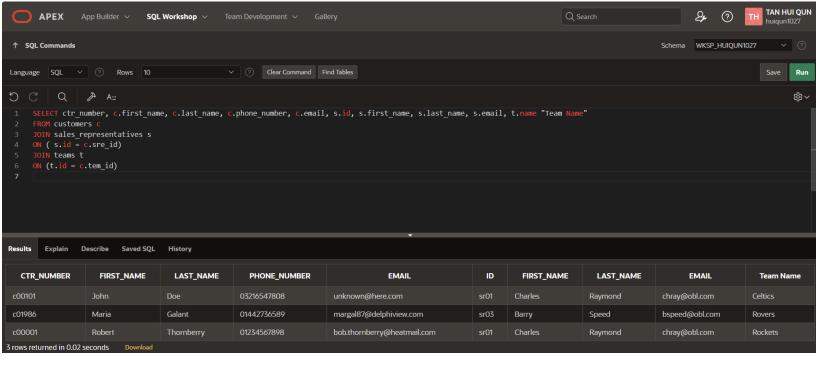
Part 3: Creating Joins with the ON Clause

1. Use an ON clause to join the customer and sales representative table so that you display the customer number, customer fist name, customer last name, customer phone number, customer email, sales representative id, sales representative first name, sales representative last name and sales representative email. You will need to use a table alias in your answer as both tables have columns with the same name.



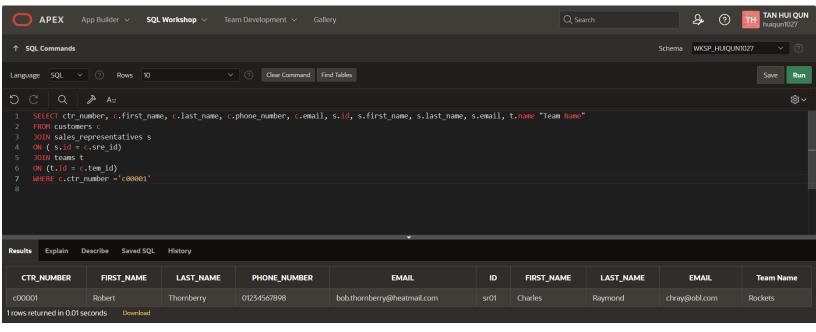
Part 4- Creating Three-Way Joins with the ON Clause

1. Using the answer to Task 3 add a join that will allow the team name that the customer represents to be included in the results.



Part 5: Applying Additional Conditions to a Join

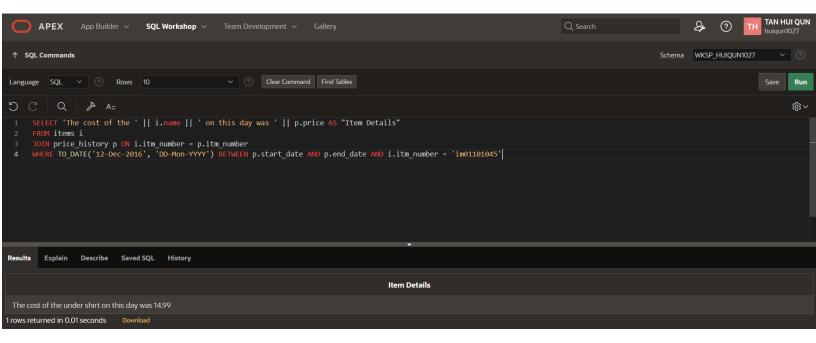
1. Using the answer to Task 4 add an additional condition to only show the results for the customer that has the number - c00001.



Part 6: Retrieving Records with Nonequijoins

1. Write a query that will display name and cost of the item with the number im01101045 on the 12th of December 2016. The output of the query should look like this:

The cost of the under shirt on this day was 14.99



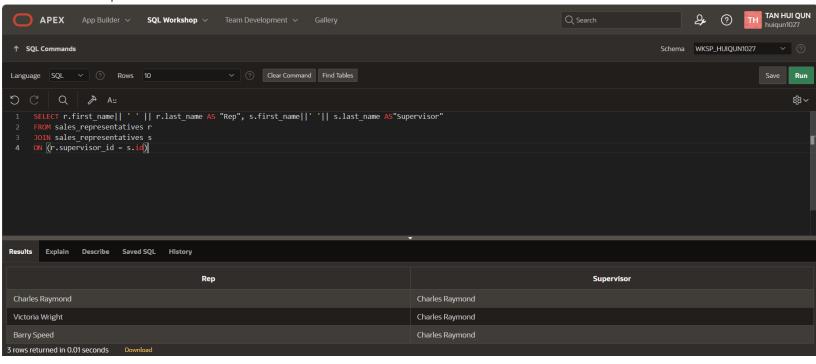
DML 3 Part 2

Section 6 Lesson 9 Exercise 2: Joining Tables Using JOIN

Write SELECT Statements Using Data From Multiple Tables Using Equijoins and Non-Equijoins (S6L9 Objective 1)

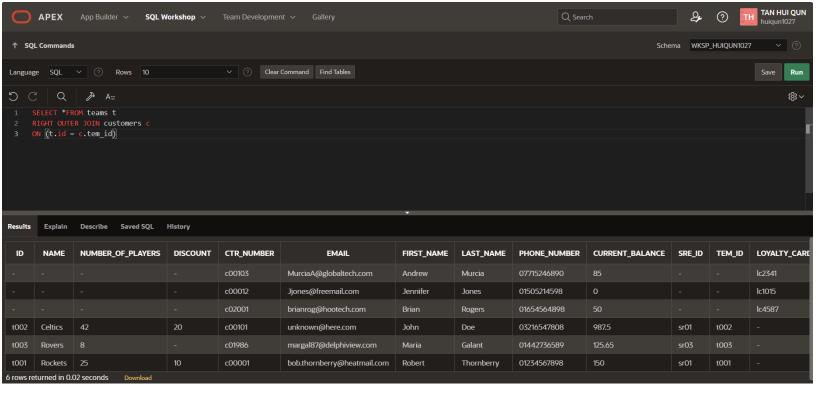
Part 1: Use a Self-Join to Join a Table to Itself (S6L9 Objective 2)

1. Write a query that will display who the supervisor is for each of the sales representatives. The information should be displayed in two columns, the first column will be the first name and last name of the sales representative and the second will be the first name and last name of the supervisor. The column aliases should be Rep and Supervisor.



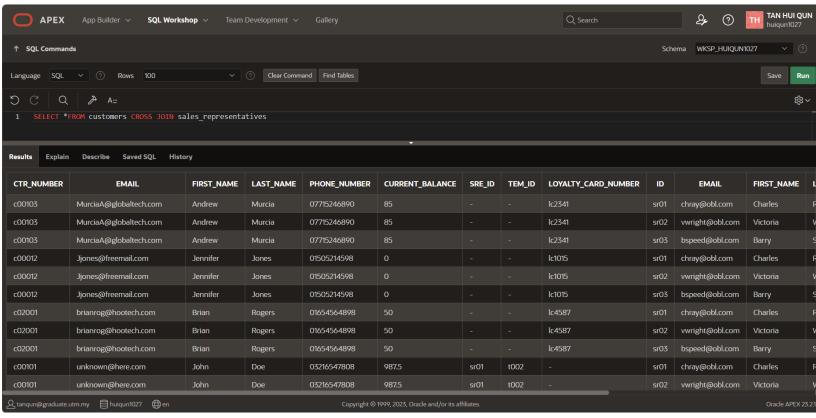
Part 2: Use OUTER joins (S6L9 Objective 3)

1. Write a query that will display all of the team and customer information even if there is no match with the table on the left (team).



Part 3: Generating a Cartesian Product (S6L9 Objective 4)

1. Create a Cartesian product between the customer and sales representative tables. Row 1 until Row 11



AME	PHONE_NUMBE	R CURRENT_BALANCE	SRE_ID	TEM_ID	LOYALTY_CARD_NUMBER	ID	EMAIL	FIRST_	NAME	LAST_NAME	PHONE_NUMBER	COMMISSION_RATE	SUPERVISOR_ID
	07715246890	85			lc2341	sr01	chray@obl.com	Charles		Raymond	0134598761	10	sr01
	07715246890	85			lc2341	sr02	vwright@obl.com	Victoria	a	Wright	0134598762		sr01
	07715246890	85			lc2341	sr03	bspeed@obl.com	Barry		Speed	0134598763		sr01
	01505214598				lc1015	sr01	chray@obl.com	Charles	s	Raymond	0134598761	10	sr01
	01505214598				lc1015	sr02	vwright@obl.com	Victoria	a	Wright	0134598762		sr01
	01505214598				lc1015	sr03	bspeed@obl.com	Barry		Speed	0134598763		sr01
	01654564898	50			lc4587	sr01	chray@obl.com	Charles		Raymond	0134598761		sr01
	01654564898	50			lc4587	sr02	vwright@obl.com	Victoria	a	Wright	0134598762		sr01
	01654564898	50			lc4587	sr03	bspeed@obl.com	Barry		Speed	0134598763		sr01
	03216547808	987.5	sr01	t002		sr01	chray@obl.com	Charles	5	Raymond	0134598761	10	sr01
	03216547808	987.5	sr01	t002	-	sr02	vwright@obl.com	Victoria	a	Wright	0134598762	5	sr01
											Oracle APEX 23.2.1		
	Row 12 unt	il Row 18											
c001	01 unkn	own@here.com	John	Doe	03216547808	987.5	5	sr01	t002		SI	03 bspeed@obl.com	Barry S
c019	86 marg	al87@delphiview.com	Maria	Gala	nt 01442736589	425.4							
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	86 marg	al87@delphiview.com	Maria	Gala		125.6		sr03 sr03	t003			01 chray@obl.com 02 vwright@obl.com	Charles F Victoria V
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Results Explain Describe Saved SQL History

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