DATABASE (SECD 2523-10)

LAB EXERCISE 4 (DML3)
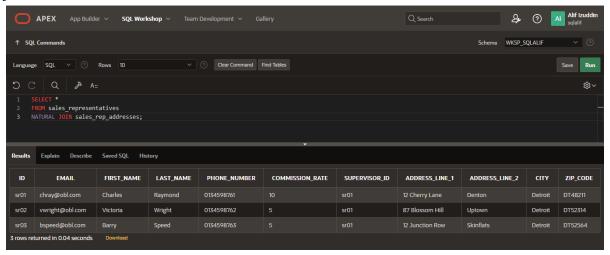
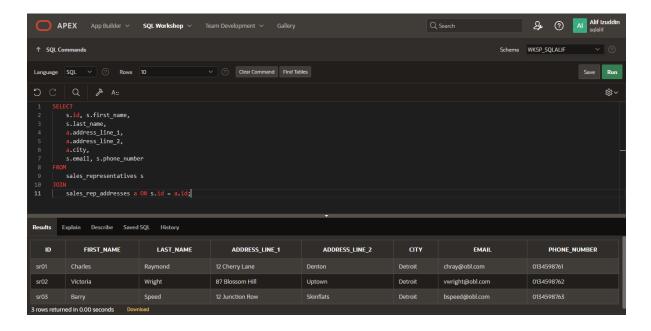## MUHAMMAD ALIF IZUDDIN BIN AZMAN

A22EC0202

Section 6 Lesson 9 Exercise 1: Joining Tables Using JOIN
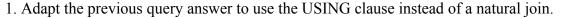
Part 1: Creating Natural Joins.

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

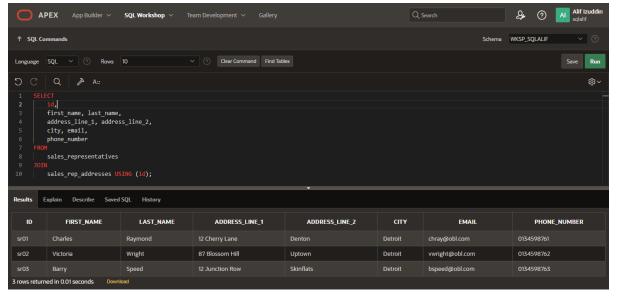2. Adapt the query from the previous question to only show the id, first name, last name, address line 1, address line 2, city, email and phone_number for the sales representatives.

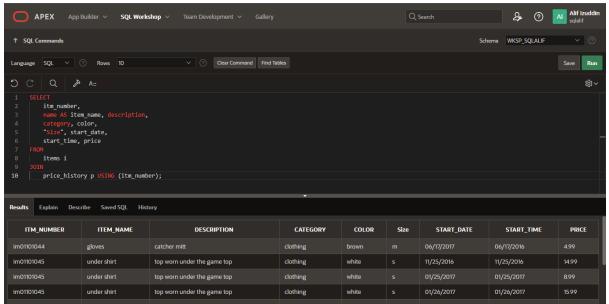**Part 2: Creating Joins with the USING Clause**

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 first 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 the 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

Section 6 Lesson 9 Exercise 2: Joining Tables Using JOIN

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.

Output :

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SQL Commands — Schema WKSP_SQLALIF

Language SQL — Rows 20 — Clear Command — Find Tables — Save — Run

Results | Explain | Describe | Saved SQL | History

CUSTOMER_ID	CUSTOMER_EMAIL	CUSTOMER_FIRST_NAME	CUSTOMER_LAST_NAME	CUSTOMER_PHONE_NUMBER	CUSTOMER_CURRENT_BALANCE	SALES_REP_ID	SALES_RE
c02001	brianrog@hootech.com	Brian	Rogers	01654564898	50	sr01	chray@obl
c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	chray@obl
c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	sr01	chray@obl
c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	chray@obl
c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	sr01	chray@obl
c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr01	chray@obl
c02001	brianrog@hootech.com	Brian	Rogers	01654564898	50	sr02	vwright@c
c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr02	vwright@c
c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	sr02	vwright@c
c00101	unknown@here.com	John	Doe	03216547808	987.5	sr02	vwright@c

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SQL Commands — Schema WKSP_SQLALIF

Language SQL — Rows 20 — Clear Command — Find Tables — Save — Run

Results | Explain | Describe | Saved SQL | History

ALANCE	SALES_REP_ID	SALES_REP_EMAIL	SALES_REP_FIRST_NAME	SALES_REP_LAST_NAME	SALES_REP_PHONE_NUMBER	SALES_REP_COMMISSION_RATE	SALES_REP_SUPERVISOR_ID
	sr01	chray@obl.com	Charles	Raymond	0134598761	10	sr01
	sr01	chray@obl.com	Charles	Raymond	0134598761	10	sr01
	sr01	chray@obl.com	Charles	Raymond	0134598761	10	sr01
	sr01	chray@obl.com	Charles	Raymond	0134598761	10	sr01
	sr01	chray@obl.com	Charles	Raymond	0134598761	10	sr01
	sr01	chray@obl.com	Charles	Raymond	0134598761	10	sr01
	sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01
	sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01
	sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01
	sr02	vwright@obl.com	Victoria	Wright	0134598762	5	sr01