
UTM

UNIVERSITI TEKNOLOGI MALAYSIA

# SECD2523
# DATABASE

## SECTION 10

## SQL LAB 4 - DML 3 PART 2

## PREPARED FOR:

## MADAM ROZILAWATI BINTI DOLLAH @ MD ZAIN

## PREPARED BY:



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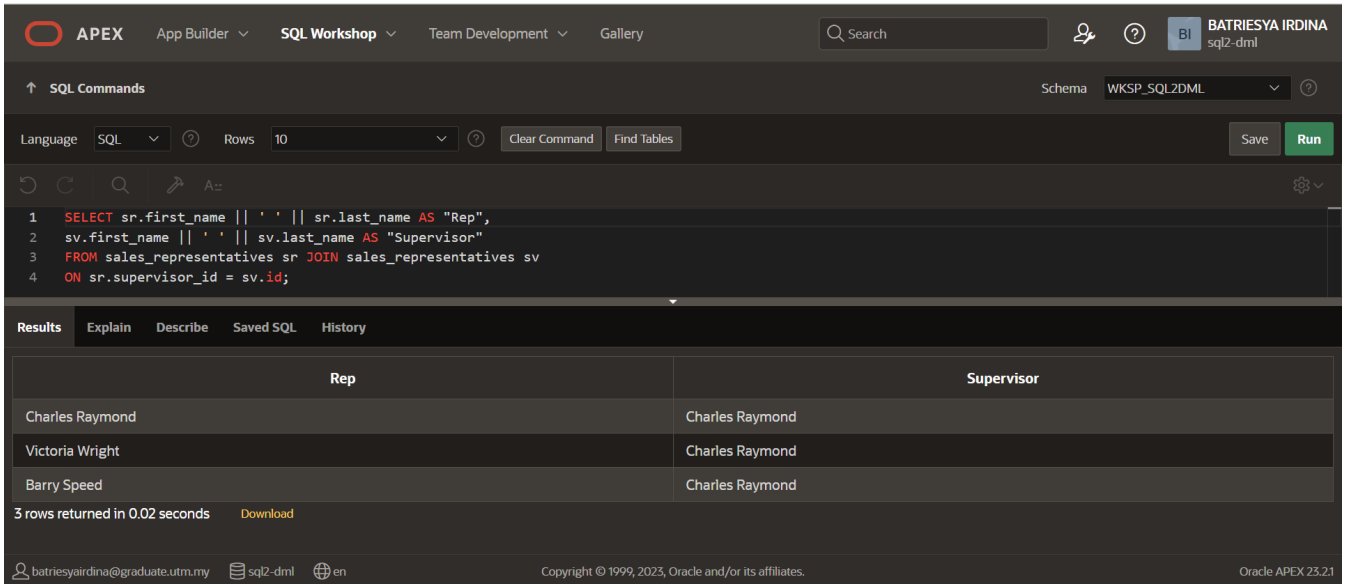
|---|---|
| BATRIESYA IRDINA BINTI KHAIRUL HEZAL | A22EC0141 |

**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 sales representative. 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 column will be the first name and the last name of the supervisor. The column aliases should be Rep and Supervisor.

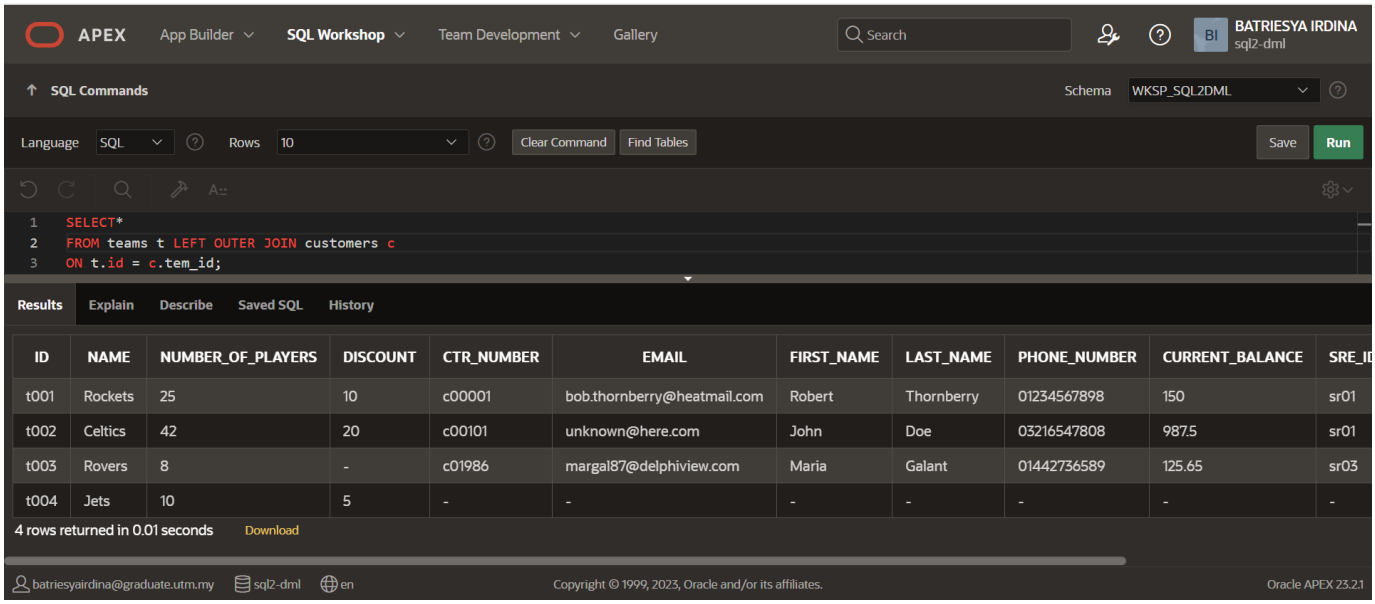
    - **SELECT sr.first_name || ' ' || sr.last_name AS "Rep",**
      **sv.first_name || ' ' || sv.last_name AS "Supervisor"**
      **FROM sales_representatives sr JOIN sales_representatives sv**
      **ON sr.supervisor_id = sv.id;**




## 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).

    - **SELECT***
      **FROM teams t LEFT OUTER JOIN customers c**
      **ON t.id = c.tem_id;**

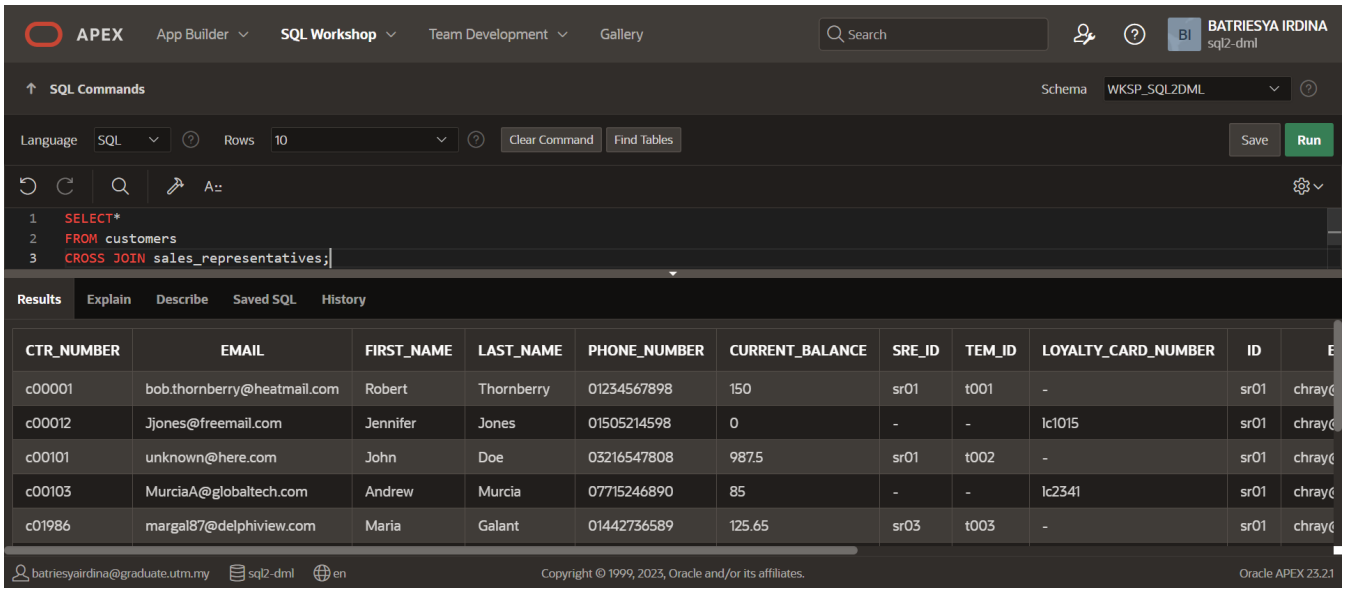



| ID | NAME | NUMBER_OF_PLAYERS | DISCOUNT | CTR_NUMBER | EMAIL | FIRST_NAME | LAST_NAME | PHONE_NUMBER | CURRENT_BALANCE | SRE_ID |
|---|---|---|---|---|---|---|---|---|---|---|
| t001 | Rockets | 25 | 10 | c00001 | bob.thornberry@heatmail.com | Robert | Thornberry | 01234567898 | 150 | sr01 |
| t002 | Celtics | 42 | 20 | c00101 | unknown@here.com | John | Doe | 03216547808 | 987.5 | sr01 |
| t003 | Rovers | 8 | - | c01986 | margal87@delphiview.com | Maria | Galant | 01442736589 | 125.65 | sr03 |
| t004 | Jets | 10 | 5 | - | - | - | - | - | - | - |

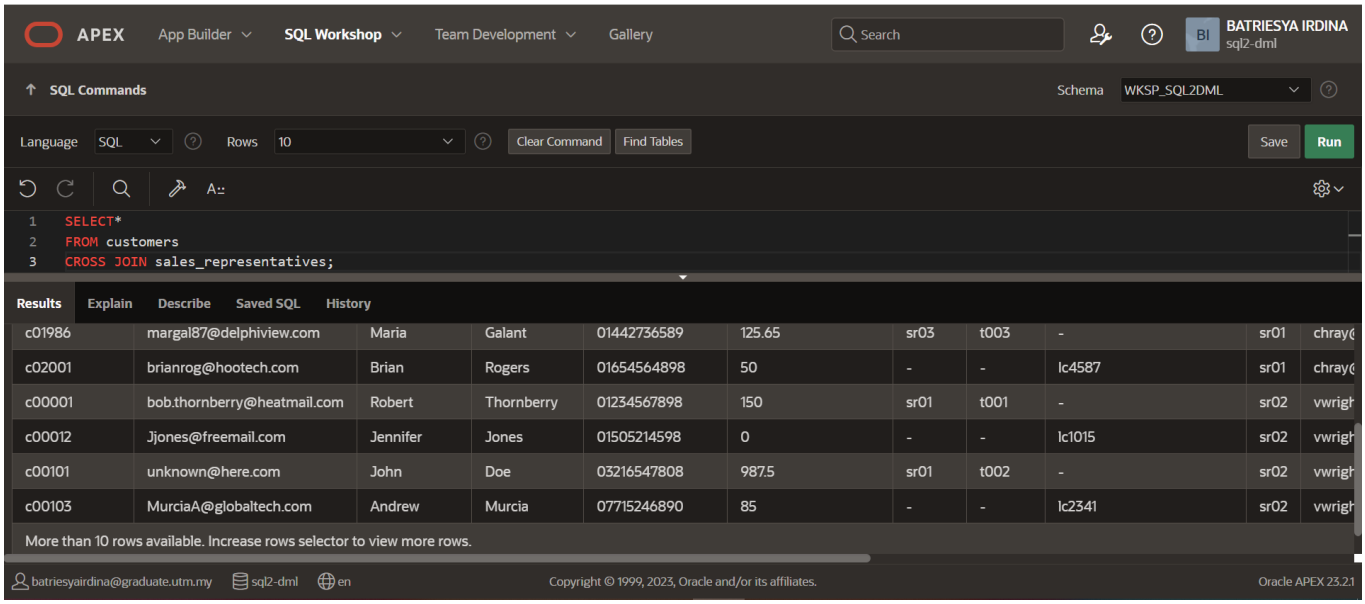
## Part 3: Generating a cartesian product (S6L9 Objective 4)

1. Create a cartesian product between the customer and sales representative table.

    - **SELECT***
      **FROM customers**
      **CROSS JOIN sales_representatives;**




| CTR_NUMBER | EMAIL | FIRST_NAME | LAST_NAME | PHONE_NUMBER | CURRENT_BALANCE | SRE_ID | TEM_ID | LOYALTY_CARD_NUMBER | ID | E |
|---|---|---|---|---|---|---|---|---|---|---|
| c00001 | bob.thornberry@heatmail.com | Robert | Thornberry | 01234567898 | 150 | sr01 | t001 | - | sr01 | chray( |
| c00012 | Jjones@freemail.com | Jennifer | Jones | 01505214598 | 0 | - | - | lc1015 | sr01 | chray( |
| c00101 | unknown@here.com | John | Doe | 03216547808 | 987.5 | sr01 | t002 | - | sr01 | chray( |
| c00103 | MurciaA@globaltech.com | Andrew | Murcia | 07715246890 | 85 | - | - | lc2341 | sr01 | chray( |
| c01986 | margal87@delphiview.com | Maria | Galant | 01442736589 | 125.65 | sr03 | t003 | - | sr01 | chray( |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sql2-dml
SQL Commands
Schema
WKSP_SQL2DML
Language
SQL
Rows
10
Clear Command
Find Tables
Save
Run
1 SELECT*
2 FROM customers
3 CROSS JOIN sales_representatives;
Results
Explain
Describe
Saved SQL
History
c01986 margal87@delphiview.com Maria Galant 01442736589 125.65 sr03 t003 - sr01 chray
c02001 brianrog@hootech.com Brian Rogers 01654564898 50 - - lc4587 sr01 chray
c00001 bob.thornberry@heatmail.com Robert Thornberry 01234567898 150 sr01 t001 - sr02 vwrigh
c00012 Jjones@freemail.com Jennifer Jones 01505214598 0 - - lc1015 sr02 vwrigh
c00101 unknown@here.com John Doe 03216547808 987.5 sr01 t002 - sr02 vwrigh
c00103 MurciaA@globaltech.com Andrew Murcia 07715246890 85 - - lc2341 sr02 vwrigh
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