



## DML 3

<b>Programme</b>	:	Bachelor of Computer Science <i>(Computer Network and Security)</i>
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**Prepared by** : 1) Muhammad Haziq bin Saamsol  
(A22EC0214)

**Section** : 03

**Lecturer** : Dr. Izyan Izzati Kamsani

## SQL DML 3

### Part 1 : Creating Natural joins

1. Select \* from sales\_representatives Natural Join sales\_rcp\_addresses;
2. Select id, first\_name, last\_name, address\_line\_1, address\_line\_2, city, email, phone\_number  
from sales\_representatives Natural Join sales\_rcp\_addresses;

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

1. Select id, first\_name, last\_name, address\_line\_1, address\_line\_2, city, email, phone\_number  
from sales\_representatives join sales\_rcp\_addresses using (id);
2. Select \* from items join price\_history using (item\_number);

### Part 3 : Creating joins with the ON clause

1. Select c.cust\_number, c.first\_name, c.last\_name, c.phone\_number, c.email, s.id, s.first\_name, s.last\_name, s.email  
from customers c join sales\_representatives on (c.srv\_id = s.id);

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## Part 4: Creating Three-Way joins with the ON Clause.

1. Select c.cust\_number, c.first\_name, c.last\_name, c.phone\_number, c.email,  
s.id, s.first\_name, s.last\_name, s.email, t.name  
from customers c join sales\_representatives s  
on (c.sre\_id = s.id)  
join teams t on (c.team\_id = t.id);

## Part 5: Applying Additional Conditions to a join.

1. Select c.cust\_number, c.first\_name, c.last\_name, c.phone\_number,  
c.email, s.id, s.first\_name, s.last\_name, s.email, t.name  
from customers c join sales\_representatives s  
on (c.sre\_id = s.id)  
join teams t on (c.team\_id = t.id)  
where c.cust\_number = 'C00001';

## Part 6: Retrieving Records with Nonequijoins.

Select 'The cost of the '11inonic' on this day was \$11.99'  
from items i join price\_history p  
where i.item\_number = 'im0101045' and '12/12/2016' between p.start\_date and p.end\_date  
and '12/12/2016' between p.start\_date and p.end\_date;

## DML 3 Exercise 2

Part 1: Use a self join a table to itself

1. Select rep.first\_name || " " || rep.last\_name as "Rep",  
supervisor.first\_name || " " || supervisor.last\_name "Supervisor"  
from sales\_representatives rep join sales\_representatives supervisor  
on (rep.supervisor\_id = supervisor.id);

Part 2: Use outer join

1. Select \* from teams left outer join customers;

Part 3: Generating a Cartesian product

1. Select \* from customers, sales\_representatives;