

LIN CHIONG HU A22EC0184

Part 1: Retrieving all columns from a table

① Customers

```
SELECT * FROM customers ;
```

② teams

```
SELECT * FROM teams ;
```

③ items

```
SELECT * FROM items ;
```

PART 2 : Selecting Specific Columns

① Display the customer no. first name, last name, email and phone number of the customer

```
SELECT ctr_number, first_name, last_name, email, phone_number  
  
FROM customers ;
```

② Display the name and number of players for each team

```
SELECT name, number_of_players  
  
FROM teams ;
```

③ Display the name, description and category for every item in the table

```
SELECT name, description, category  
  
FROM items ;
```

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PART 1: Using Arithmetic Operators

① SELECT first\_name, last\_name, current\_balance / 12  
FROM customers ;

② SELECT first\_name, last\_name, current\_balance - 5  
FROM customers;

③ When current balance is zero, the 'current\_balance - 5' becomes -5 which is illogical in real world.

## PART 2 : Using Column Aliases

① SELECT first\_name "First Name", last\_name "Last Name", current\_balance "Balance",  
current\_balance/12 "Monthly Repayments"  
FROM customers;

## PART 3 : Using Literal Character Strings

① SELECT 'The' || name || 'team has' || number\_of\_players || 'player and receives a discount of ' ||  
discount || 'percent.' "Team Information"

② It is because the discount of the last team (Rovers) is null.

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## PART 1 : Using the WHERE Clause

① SELECT \*  
FROM customers  
WHERE ctr\_number = "C01986"

② SELECT first\_name, last\_name, Ctr\_number  
FROM customers  
WHERE current\_balance > 100;

③ SELECT id, ord\_date, ord\_time  
FROM orders  
WHERE ord\_date < 'May-28-2019';

## Part 2 : Range Conditions : Between Operator

SELECT \*  
FROM inventory\_list  
WHERE COST BETWEEN 3.00 AND 15.00;

## PART 3 : Membership Conditions : IN Operator

① SELECT \*

FROM inventory-list

WHERE units IN (50, 100, 150, 200);

PART 4 : Membership Conditions : NOT IN Operator

① SELECT \*

FROM inventory-list

WHERE units NOT IN (50, 100, 150, 200);

PART 5 : Pattern Matching : LIKE Operator

① SELECT itm\_number "Item Number", name "Item Name"

FROM items

WHERE name LIKE 'g%';

PART 6 : Pattern Matching: Combining Wildcard Characters with the LIKE Operator

① SELECT itm\_number "Item Number", name "Item Name"

FROM items

WHERE name LIKE '%0%';

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PART 1 : Using the NULL Conditions

① SELECT 'The' || name || 'team has' || number\_of\_players || 'player and does not receive a discount.' "Team Information"

FROM teams

WHERE discount IS NULL;

② SELECT 'The' || name || 'team has' || number\_of\_players || 'player and receives a discount of ' || discount || 'percent.' "Team Information"

FROM teams

WHERE discount IS NOT NULL;

PART 2 : Logical Operations : AND

① SELECT ctr\_number "Customer Number", address\_line\_1 "Street Address", zip\_code "Postal Code"

FROM customer-address

WHERE city = 'Liverpool' AND address\_line\_2 = 'starford';

PART 3 : Logic Operators : OR

① SELECT ctr-number "Customer Number", address\_line\_1 "Street Address", zip-code "Postal Code"  
FROM customers\_address  
WHERE city = 'Liverpool' OR address\_line\_2 = 'Starford';

PART 4: Logical Operators: NOT Equal to

① SELECT ctr-number "Customer Number", address\_line\_1 "Street Address", zip-code "Postal Code"  
FROM customers\_address  
WHERE city <> 'Liverpool'

① SELECT name "Team Name", number\_of\_players "Number of players"  
FROM teams  
ORDER BY name;

② SELECT name "Team Name", number\_of\_players "Number of players"  
FROM teams  
ORDER BY number\_of\_players DESC;

③ SELECT name "Team Name", number\_of\_players "Players"  
FROM teams  
ORDER BY name DESC;

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PART 1: TOP-N-ANALYSIS

① SELECT ROWNUM "Top 3 Customers", first\_name || ' ' || last\_name "Customer Name"  
FROM  
(SELECT first\_name, last\_name  
FROM customers  
ORDER BY ctr-number)  
WHERE ROWNUM <= 3;

② SELECT first\_name "First Name", last\_name "Last Name"  
FROM sales-representatives  
WHERE commission\_rate = :rate  
ORDER BY last\_name;