

SQL3: DML 2

Exercise 1

Part 1: Retrieving all columns from a table

1. `SELECT * FROM CUSTOMERS;`

2. `SELECT * FROM TEAMS;`

3. `SELECT * FROM ITEMS;`

Part 2: Selecting Specific Columns

1. `SELECT ctr_number, first_name, last_name, email, phone_number
FROM CUSTOMERS;`

2. `SELECT name, number-of-players
FROM TEAMS;`

3. `SELECT name, description, category
FROM ITEMS;`

Exercise 2

Part 1: Using Arithmetic Operations

1. `SELECT first_name, last_name, current_balance, current_balance / 12
FROM CUSTOMERS;`

2. `SELECT first_name, last_name, ctr_number, current_balance, current_balance - 5.0
FROM CUSTOMERS;`

3. The current balance will return negative value which result to inaccurate data stored.

PART 2

1. `SELECT first_name "First Name", last_name "Last Name", current_balance "Balance",
current_balance + 12 "Monthly Repayments"
FROM CUSTOMERS;`

PART 3

1. `SELECT 'The' || name || 'team has' || number-of-players || 'players and receives
a discount of ' || discount || 'percent' AS "Team Information"
FROM TEAMS;`

2. Because the discount for the last team is a NULL value

Exercise 3

PART 1:

1. SELECT * FROM CUSTOMERS
WHERE ctr-number = 'c_01986';
2. SELECT first-name "First Name", last-name "Last Name", ctr-number "Number"
FROM CUSTOMERS
WHERE current_balance > 100;
3. SELECT id "Order ID", odr-date "Date", odr-time "Time"
FROM ORDERS
WHERE odr-date < TO_DATE('28-May-2019', 'DD-MMM-YYYY');

PART 2:

1. SELECT id "Inventory ID", cost "Cost", units "Number of units"
FROM inventory-list
WHERE cost BETWEEN 3.00 AND 15.00;

PART 3

1. SELECT id "Inventory ID", cost "Cost", units "Number of units"
FROM inventory-list
WHERE units IN (50, 100, 150, 200);

PART 4

1. SELECT id "Inventory ID", cost "Cost", units "Number of units"
FROM inventory-list
WHERE unit NOT IN (50, 100, 150, 200);

PART 5

1. SELECT itm-number "Item Number", name "Name"
FROM ITEMS
WHERE name LIKE 'g%';

PART 6

1. SELECT itm-number "Number", name "Name"
FROM items
WHERE name LIKE '%o%';

Exercise 4

PART 1:

1. SELECT 'The ' || name || ' team has ' || number-of-players || ' players and does not a discount.' AS "Team Information"
FROM TEAMS
WHERE discount IS NULL;
2. SELECT 'The ' || name || ' team has ' || number-of-players || ' players and receives a discount of ' || discount || ' percent.' AS "Team Information"
FROM TEAMS
WHERE discount IS NOT NULL;

PART 2

1. SELECT ctr_number "Customer Number", address-line-1 "Street Address",
zip-code "Postal Code"
FROM customers-addresses
WHERE address-line-2 = 'Stanford' AND city = 'Liverpool';

PART 3:

1. SELECT ctr_number "Customer Number", address-line-1 "Street Address",
zip-code "Postal Code"
FROM customers-addresses
WHERE address-line-2 = 'Stanford' OR city = 'Liverpool';

PART 4:

1. SELECT ctr_number "Customer Number", address-line-1 "Street Address",
zip-code "Postal Code"
FROM customers-addresses
WHERE city NOT IN ('Liverpool');

Exercise 5

1. SELECT name "Team Name", number-of-players "Total Players"
FROM TEAMS
ORDER BY name;
2. SELECT name "Team Name", number-of-players "Total Players"
FROM TEAMS
ORDER BY number-of-players DESC;
3. SELECT name "Team Name", number-of-players "Total Players"
FROM TEAMS
ORDER BY "Team Name" DESC;

Exercise 6

Part 1

```
1. SELECT ROWNUM AS "Customer"  
   first_name || ' ' || last_name AS "Customer Name"  
FROM CUSTOMERS  
WHERE ROWNUM < 4;
```

PART 2

```
1. SELECT first_name "First Name", last_name "Last Name"  
FROM SALES_REPRESENTATIVES  
WHERE commission_rate = :new-rate  
ORDER BY last_name;
```