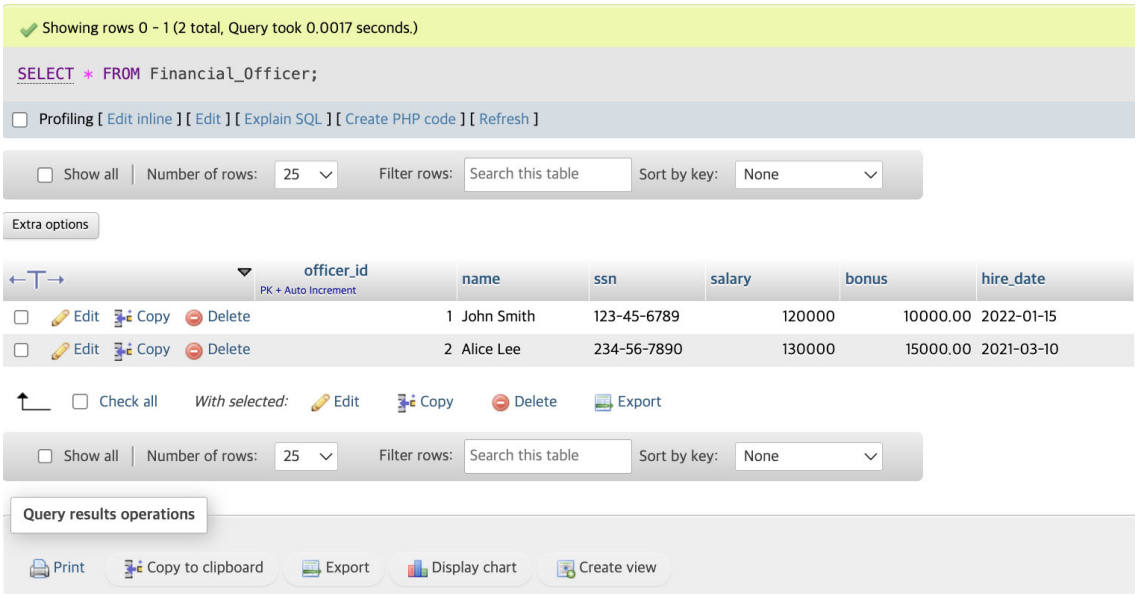
Part 1.1 – Financial_Officer

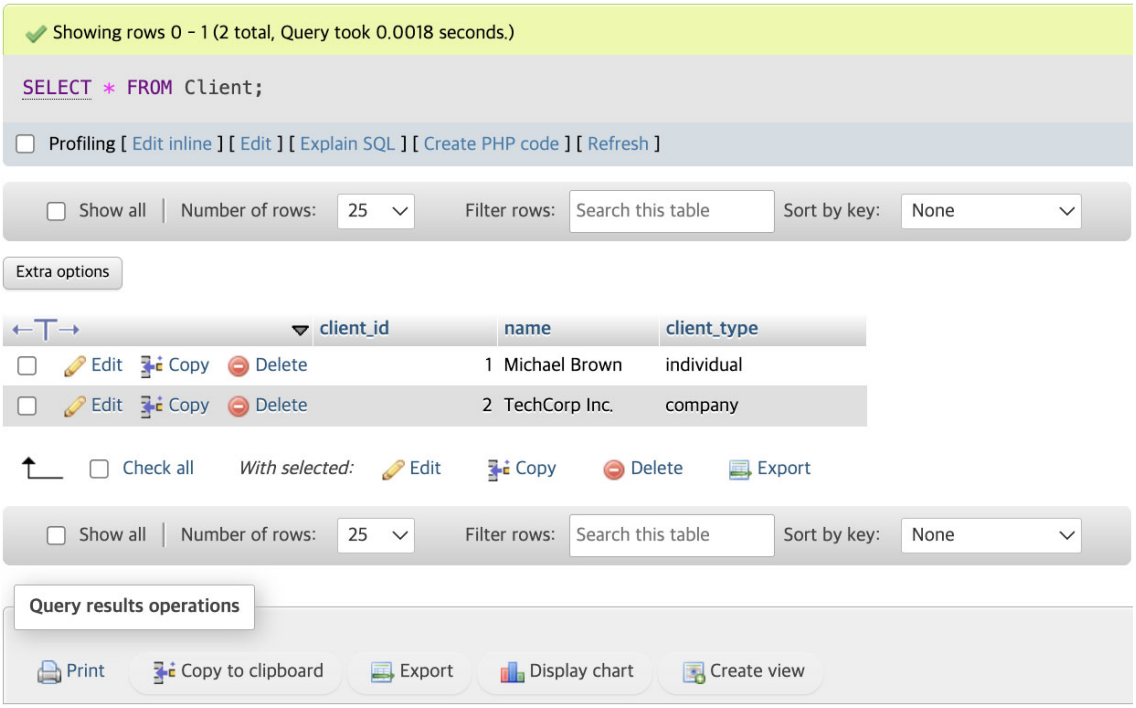
- SQL Query : SELECT * FROM Financial_Officer;



This query retrieves all tuples from the Financial_Officer relation.
The table contains two records representing financial officers with their salary and hire dates.

Part 1.2 – Client

- SQL Query: SELECT * FROM Client;



This query retrieves all tuples from the Client relation.
The Client table stores basic information about all clients in the system, including both individuals and companies. Each tuple contains:

- client_id - unique identifier of each client
- name - client's name or company name
- client_type - specifies whether the client is an individual or a company

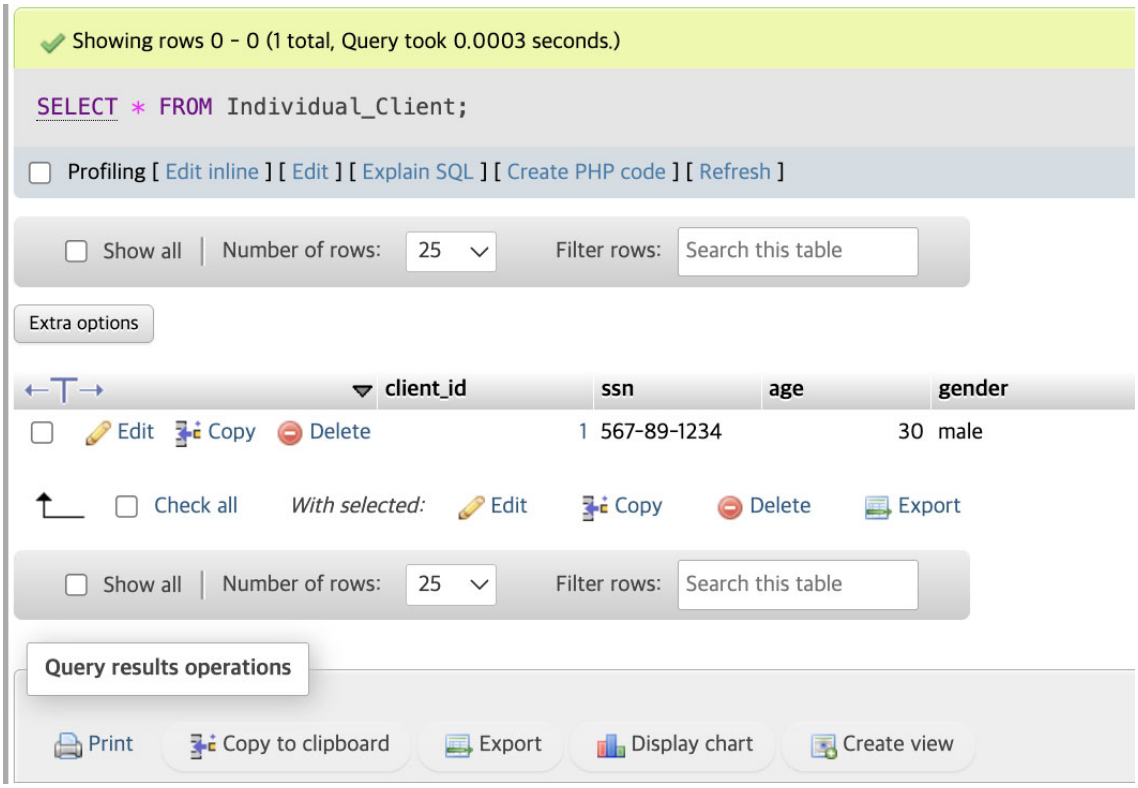
The output shows two clients:

1. Michael Brown who is an individual client
2. TechCorp Inc. which is a company client

This confirms the table is functioning correctly and contains two entries.

Part 1.3 – Individual_Client

- SQL Query : SELECT * FROM Individual_Client;



This query displays all tuples from the Individual_Client relation. This table stores detailed information about clients who are classified as individuals in the Client table. Each record includes:

- client_id - foreign key referencing the Client table
- ssn - social security number of the individual
- age - age of the client
- gender - gender of the client

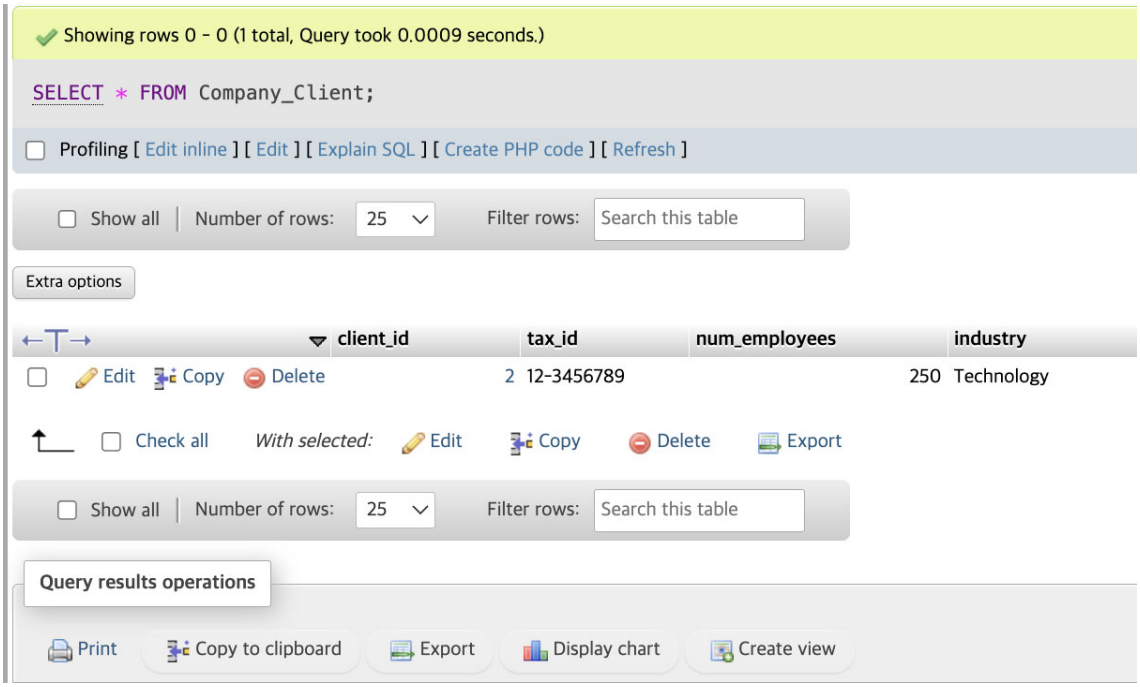
The output shows one individual client in the system:

- Client ID 1 corresponds to Michael Brown, with SSN 567-89-1234, age 30, and gender male.

This confirms that the Individual_Client table is correctly linked with the Client table and contains the expected personal details for individual-type clients.

Part 1.4 – Company_Client

- SQL Query : SELECT * FROM Company_Client;



This query retrieves all tuples stored in the Company_Client relation. This table contains information about clients that are registered as companies instead of individuals. Each tuple includes:

- client_id - foreign key referencing the Client table
- tax_id - the company's tax identification number
- num_employees - number of employees the company has
- industry - the type of industry the company belongs to

The query result shows one company client in the database:

- Client ID 2, corresponding to TechCorp Inc.
- Tax ID: 12-3456789
- Number of employees: 250
- Industry: Technology

This confirms that the Company_Client table accurately stores additional attributes relevant only to company-type clients and correctly links to the Client table via client_id.

Part 1.5 – Contact_Info

- SQL Query : SELECT * FROM Contact_Info;

This query retrieves all tuples from the Contact_Info relation. This table stores each client's contact information and contains the following attributes:

- contact_id - unique identifier (auto-incremented) for each contact record
- client_id - foreign key referencing the Client table
- phone - the client's phone number
- email - the client's email address

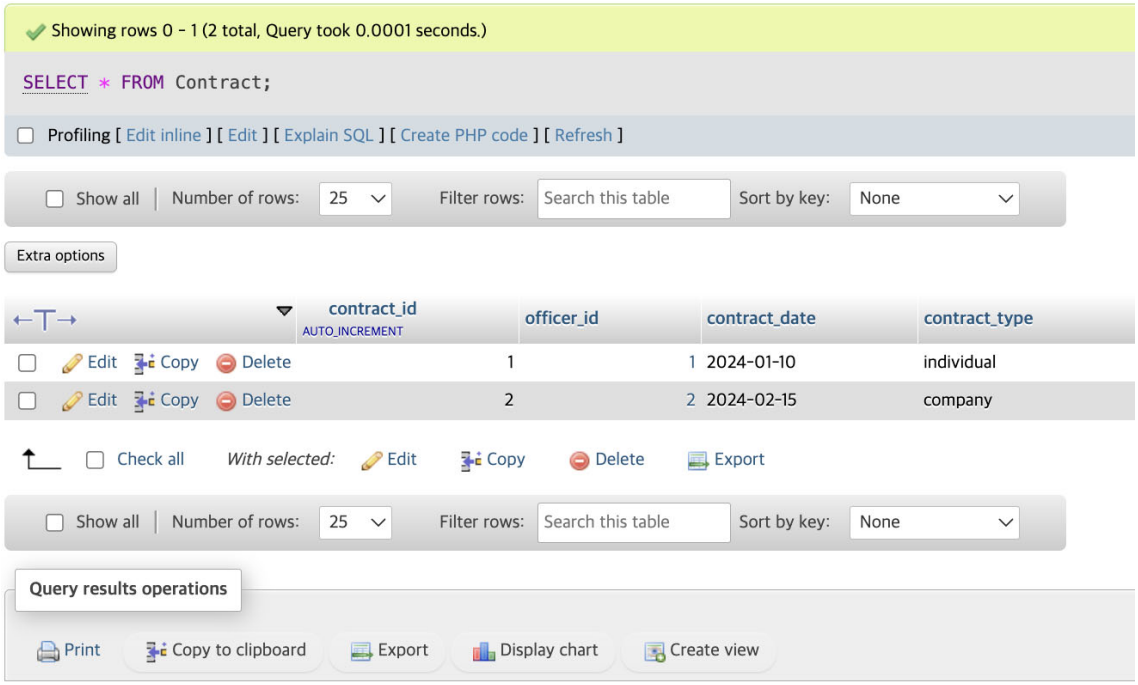
The result shows two contact entries, one for each client currently in the Client table:

1. Client 1 (Michael Brown)
   - Phone: 555-111-2222
   - Email: michael.brown@gmail.com
2. Client 2 (TechCorp Inc.)
   - Phone: 555-333-4444
   - Email: contact@techcorp.com

This confirms that each client has one associated contact record and that the Contact_Info table correctly stores and links communication details to the appropriate client via client_id.

Part 1.6 – Contract

- SQL Query : SELECT * FROM Contract;



This query retrieves all tuples from the Contract table. The Contract relation stores essential information about each contract created between a client and the financial officer responsible for handling it.

Each tuple contains the following attributes:

- contract_id - the unique identifier for each contract (auto-increment)
- officer_id - foreign key referencing the Financial_Officer table (indicating which officer created or manages the contract)
- contract_date - the date on which the contract was signed
- contract_type - indicates whether the contract is for an individual or a company

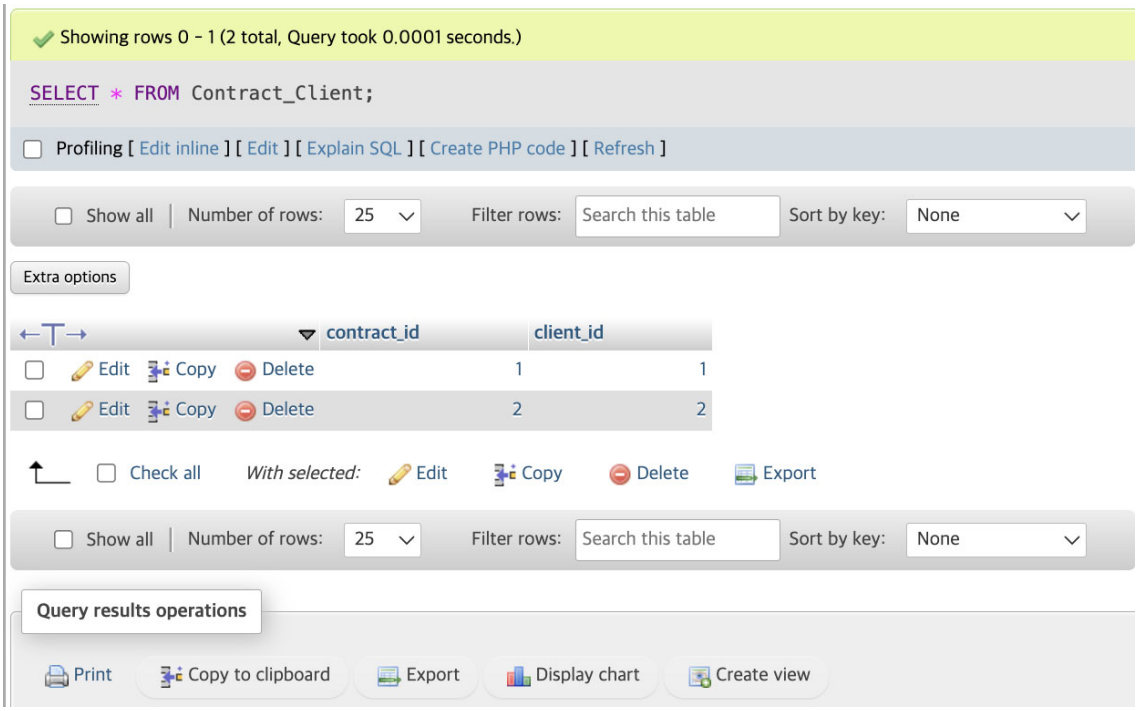
From the query result, there are two contract records:

1. Contract 1
   - Officer: ID 1
   - Date: 2024-01-10
   - Type: individual
2. Contract 2
   - Officer: ID 2
   - Date: 2024-02-15
   - Type: company

These results show that the Contract table correctly stores metadata about each contract and links them to the appropriate financial officers.

Part 1.7 – Contract_Client

- SQL Query : SELECT * FROM Contract_Client;



This query retrieves all tuples from the Contract_Client table. The Contract_Client relation serves as a linking (bridge) table, connecting each contract to the client involved in that contract.

It implements a one-to-one or one-to-many relationship between:

- contract_id - references the Contract table
- client_id - references the Client table

This table allows the system to correctly associate each contract with the appropriate client, regardless of whether the client is an individual or a company.

From the query results, we see two rows, indicating two linked contract–client pairs:

1. Contract 1 is associated with Client 1
2. Contract 2 is associated with Client 2

This confirms that each contract has been assigned to the correct client, ensuring referential integrity within the database.