Lab 2: Data Manipulation II

Insert, Update, Delete

Insert

- Specifying the column names:
  INSERT INTO person (first_name, last_name) VALUES ('John', 'Doe');

- Inserting more than 1 row at a time:
  INSERT INTO tbl_name VALUES (1, "row 1"), (2, "row 2");

- Using the SET clause:
  INSERT INTO person SET first_name = 'John', last_name = 'Doe';

- SELECTing from another table:
  INSERT INTO contractor SELECT * FROM person WHERE status = 'c';

- https://mariadb.com/kb/en/library/insert/

Update

- Single-table syntax:
  UPDATE table_name SET column1 = value1, column2 = value2 WHERE id=100;

- The subquery can be used as well:
  UPDATE table_name
  SET column1 = value1
  WHERE id = (SELECT id FROM user WHERE email = "me@example.com");

  UPDATE table_name
  SET column1 = (SELECT id FROM user WHERE email = "me@example.com")
  WHERE id = 100;

- https://mariadb.com/kb/en/library/update/

Delete

- Delete
DELETE from table_name WHERE id = 100;

- Delete with subquery condition:
DELETE from table_name
WHERE id IN (SELECT id FROM employee WHERE department_no = 5);

- https://mariadb.com/kb/en/library/delete/

Further Readings

UPSERT

- Update if given keys are existed otherwise, insert a new one.
- Well-known in NoSQL databases, such as MongoDB (https://docs.mongodb.com/manual/reference/method/Bulk.find.upsert/).

REPLACE

- This command works similarly as UPSERT command.
- As known as a shorthand of instantly delete and insert within the same transaction.
- https://mariadb.com/kb/en/library/replace/