



# **Prerequisite**

## SQL Databases & Queries

# ■ SQL Database

- ◆ Database is structured into **tables**
- ◆ Each table consists of labeled **columns**
- ◆ A piece of data can be inserted into the database, with each field corresponding to a column
  - This is called a **row**
- ◆ Multiple rows of data exist in a table, each of which can correspond to a **record**
  - A **record** is the set of rows that represent a data structure in an application

## Customer

Customer_ID	Name
1	Kim
2	Dave
3	Tonya

## Transaction

Transaction_ID	Customer_ID	Amount
910	3	14.00
545	2	12.00
746	2	33.00

# ■ Create Table

```
CREATE TABLE Customers
(
    customer_id INT PRIMARY KEY,
    name        TEXT NOT NULL
);
```

# ■ Insert Data

```
INSERT INTO Customers
(
    customer_id,
    name
)
VALUES
(
    1,
    'Kim'
);
```

## ■ Query Data

```
SELECT * FROM Customers;
```

```
SELECT name FROM Customers;
```

## ■ Update Data

```
UPDATE Customers  
SET name = 'Tanya'  
WHERE customer_id = 3;
```

## ■ Delete Data

```
DELETE FROM Customers  
WHERE customer_id = 1;
```