Republic of the Philippines

**POLYTECHNIC UNIVERSITY OF THE PHILIPPINES**

# College of Computer and Information Sciences Sta. Mesa, Manila

Database Administration

# Activity 1: SQL DDL and DML

**Instructions:** Carefully read and analyze the statements. Write down the corresponding commands for each number to accomplish the tasks, and submit your anwer in pdf format.

1. Create a new table using DDL:

Create a new table called "Sales" with the following columns: "OrderID" (int) (unique) (primary key), "Product" (varchar), "Quantity" (int), "Price" (decimal), and "Date" (datetime).

**CREATE TABLE Sales (**

**OrderID INT UNIQUE PRIMARY KEY,**

**Product VARCHAR(255),**

**Quantity INT,**

**Price DECIMAL(10, 2),**

**Date DATETIME );**

1. Insert data using DML:

Insert five new rows into the "Sales" table you just created. Each row should represent a sale (Feel free to choose products) and should include values for all five columns.

**INSERT INTO Sales (OrderID, Product, Quantity, Price, Date) VALUES**

**(1, 'Honda CBR650r', 2, 530000.00, '2023-02-20 11:30:01'),**

**(2, 'Dominar 400', 1, 195000.00, '2023-02-20 13:60:10'),**

**(3, 'Honda CB500x', 5, 384500.00, '2023-03-03 6:45:00'),**

**(4, 'CFMOTO 450sr', 10, 299900.00, '2023-02-26 13:14:05'),**

**(5, 'Ninja 1000sx', 3, 718000.00, '2023-06-10 13:00:08');**

1. Update data using DML:

Update the price of the first sale in the "Sales" table to be 3,500.00.

**UPDATE Sales SET Price = 350000.00**

**WHERE OrderID = 1;**

1. Delete data using DML:

Delete the row in the "Sales" table where the OrderID is 3.

**DELETE FROM Sales WHERE OrderID = 3**

1. Alter the table using DDL:

Add a new column to the "Sales" table called "Discount" (decimal) and set the default value to 0.00.

**ALTER TABLE Sales**

**ADD Discount decimal(10, 2) DEFAULT 0.00;**

1. Modify the table using DDL:

Change the data type of the "Quantity" column in the "Sales" table to be smallint.

**ALTER TABLE Sales**

**ALTER COLUMN Quantity SMALLINT;**

1. Use the SELECT command with WHERE clause:

Retrieve all the orders from the "Sales" table that were made on or after January 3, 2022, and have a quantity greater than or equal to 10.

**SELECT \* FROM Sales**

**WHERE Date >= '2022-01-03' AND Quantity >= 10**

1. Use the SELECT command with ORDER BY and LIMIT:

Retrieve the top 3 sales in the "Sales" table, ordered by price in descending order.

**SELECT \* FROM Sales ORDER BY Price DESC LIMIT 3;**

1. Use the SUM function to calculate the total sales: Calculate the total sales amount in the "Sales" table.

**SELECT SUM(Quantity \* Price) AS TotalSales FROM Sales;**

1. Use the AVG function to calculate the average price: Calculate the average price of all products in the "Sales" table.

**SELECT AVG(Price) AS Avrg\_Prc FROM Sales;**