### 

### **CREATE TABLE Employees(**

### **id INT PRIMARY KEY,**

### **name\_emp VARCHAR(20),**

### **age VARCHAR(3),**

### **depertment VARCHAR(20),**

### **salary NUMERIC NOT NULL);**

### **CREATE TABLE Products(**

### **p\_id INT PRIMARY KEY,**

### **P\_name VARCHAR(20) ,**

### **price NUMERIC**

### **);**

### **CREATE TABLE customers(**

### **customer\_id INT PRIMARY KEY NOT NULL,**

### **Customer\_Name VARCHAR(30) NOT null,**

### **Email VARCHAR(30)UNIQUE**

### **);**

### **CREATE TABLE orders(**

### **order\_id INT PRIMARY KEY,**

### **customer\_id INT,**

### **ORDER\_date DATE,**

### **Total\_amount NUMERIC,**

### **FOREIGN KEY(customer\_id) REFERENCES customers(customer\_id));**

### **INSERT INTO Employees (id, name\_emp, age, depertment, salary) VALUES**

### **(1, 'John Doe', '30', 'HR', 50000),**

### **(2, 'Jane Smith', '25', 'Finance', 55000),**

### **(3, 'Michael Brown', '40', 'IT', 70000),**

### **(4, 'Emily Davis', '35', 'Marketing', 60000),**

### **(5, 'David Wilson', '28', 'Sales', 48000),**

### **(6, 'Sophia Johnson', '32', 'HR', 52000),**

### **(7, 'Daniel Jones', '29', 'Finance', 53000),**

### **(8, 'Olivia Martin', '45', 'IT', 75000),**

### **(9, 'James Lee', '31', 'Marketing', 59000),**

### **(10, 'Ava Harris', '26', 'Sales', 47000),**

### **(11, 'William Clark', '37', 'HR', 51000),**

### **(12, 'Mia Lewis', '27', 'Finance', 56000),**

### **(13, 'Lucas Walker', '42', 'IT', 72000),**

### **(14, 'Isabella Hall', '34', 'Marketing', 61000),**

### **(15, 'Ethan Allen', '30', 'Sales', 50000),**

### **(16, 'Amelia Young', '33', 'HR', 53000),**

### **(17, 'Mason King', '29', 'Finance', 54000),**

### **(18, 'Harper Wright', '41', 'IT', 73000),**

### **(19, 'Alexander Scott', '36', 'Marketing', 62000),**

### **(20, 'Charlotte Green', '25', 'Sales', 49000);**

### **INSERT INTO Products (p\_id, P\_name, price) VALUES**

### **(1, 'Laptop', 1000.00),**

### **(2, 'Smartphone', 700.00),**

### **(3, 'Tablet', 500.00),**

### **(4, 'Monitor', 300.00),**

### **(5, 'Keyboard', 50.00),**

### **(6, 'Mouse', 30.00),**

### **(7, 'Printer', 150.00),**

### **(8, 'Scanner', 120.00),**

### **(9, 'Speaker', 80.00),**

### **(10, 'Headphones', 90.00),**

### **(11, 'Webcam', 60.00),**

### **(12, 'External HDD', 100.00),**

### **(13, 'USB Drive', 20.00),**

### **(14, 'Memory Card', 25.00),**

### **(15, 'Router', 110.00),**

### **(16, 'Modem', 130.00),**

### **(17, 'Power Bank', 40.00),**

### **(18, 'Charger', 25.00),**

### **(19, 'Adapter', 15.00),**

### **(20, 'Projector', 400.00);**

### **INSERT INTO customers (customer\_id, Customer\_Name, Email) VALUES**

### **(1, 'John Doe', 'johndoe@example.com'),**

### **(2, 'Jane Smith', 'janesmith@example.com'),**

### **(3, 'Michael Brown', 'michaelbrown@example.com'),**

### **(4, 'Emily Davis', 'emilydavis@example.com'),**

### **(5, 'David Wilson', 'davidwilson@example.com'),**

### **(6, 'Sophia Johnson', 'sophiajohnson@example.com'),**

### **(7, 'Daniel Jones', 'danieljones@example.com'),**

### **(8, 'Olivia Martin', 'oliviamartin@example.com'),**

### **(9, 'James Lee', 'jameslee@example.com'),**

### **(10, 'Ava Harris', 'avaharris@example.com'),**

### **(11, 'William Clark', 'williamclark@example.com'),**

### **(12, 'Mia Lewis', 'mialewis@example.com'),**

### **(13, 'Lucas Walker', 'lucaswalker@example.com'),**

### **(14, 'Isabella Hall', 'isabellahall@example.com'),**

### **(15, 'Ethan Allen', 'ethanallen@example.com'),**

### **(16, 'Amelia Young', 'ameliayoung@example.com'),**

### **(17, 'Mason King', 'masonking@example.com'),**

### **(18, 'Harper Wright', 'harperwright@example.com'),**

### **(19, 'Alexander Scott', 'alexanderscott@example.com'),**

### **(20, 'Charlotte Green', 'charlottegreen@example.com');**

### **INSERT INTO orders (order\_id, customer\_id, ORDER\_date, Total\_amount) VALUES**

### **(1, 1, '2024-01-01', 250.00),**

### **(2, 2, '2024-01-02', 150.00),**

### **(3, 3, '2024-01-03', 300.00),**

### **(4, 4, '2024-01-04', 100.00),**

### **(5, 5, '2024-01-05', 450.00),**

### **(6, 6, '2024-01-06', 200.00),**

### **(7, 7, '2024-01-07', 350.00),**

### **(8, 8, '2024-01-08', 400.00),**

### **(9, 9, '2024-01-09', 120.00),**

### **(10, 10, '2024-01-10', 600.00),**

### **(11, 11, '2024-01-11', 220.00),**

### **(12, 12, '2024-01-12', 180.00),**

### **(13, 13, '2024-01-13', 270.00),**

### **(14, 14, '2024-01-14', 310.00),**

### **(15, 15, '2024-01-15', 90.00),**

### **(16, 16, '2024-01-16', 420.00),**

### **(17, 17, '2024-01-17', 110.00),**

### **(18, 18, '2024-01-18', 330.00),**

### **(19, 19, '2024-01-19', 240.00),**

### **(20, 20, '2024-01-20', 500.00);**

### **Instructions**

### **Create Employees Table:**

### **This table stores information about employees such as their ID, Name, Age, Department, and Salary.**

### **Create Products Table:**

### **This table stores information about products such as their ID, ProductName, and Price.**

### **Create Orders Table:**

### **This table stores information about orders placed by customers, including OrderID, CustomerID (foreign key referencing Customers table), OrderDate, and TotalAmount.**

### **Create Customers Table:**

### **This table stores information about customers such as their ID, CustomerName, and Email.**

### 

# **Exercise**

### **SELECT Queries**

1. Retrieve all columns from the Employees table.

**SELECT** \* **FROM** employees

1. Fetch the ProductName and Price columns from the Products table.

**SELECT** P\_name ,price **FROM** products

1. Get the CustomerName and Email columns from the Customers table.

**SELECT** Customer\_Name ,Email **FROM** customers

1. Select the OrderDate and TotalAmount columns from the Orders table.

**SELECT** ORDER\_date ,Total\_amount **FROM** orders

1. Fetch all columns from the Employees table for employees aged 25 and younger.

**SELECT** \* **FROM** employees **WHERE** age<=25

1. Retrieve the ProductName and Price columns from the Products table where Price is greater than $500.

**SELECT** P\_name,Price **FROM** products **WHERE** price>500

1. Get the CustomerName and Email columns from the Customers table where Email ends with "@example.com".

**SELECT** customer\_name, email **FROM** customers **WHERE** email **LIKE** "j%example.com"

1. Select the OrderDate and TotalAmount columns from the Orders table where TotalAmount is greater than or equal to $1000.

**SELECT** order\_date,Total\_amount **FROM** orders **WHERE** total\_amount>=1000

1. Fetch all columns from the Employees table sorted alphabetically by Name.

**SELECT** \* **FROM** employees **ORDER** **BY** name\_emp

1. Retrieve the ProductName and Price columns from the Products table sorted by Price in descending order.

**SELECT** P\_name,price **FROM** products **ORDER** **BY** price **desc**

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### **UPDATE Queries**

1. Update the Salary of employee with ID 3 to $65000 in the Employees table.

**UPDATE** employees

**SET** salary=65000 **WHERE** id=3

1. Increase the Price of the Laptop product to $1300 in the Products table.

**UPDATE** products

**SET** price=1300 **WHERE** p\_name='Laptop'

1. Update the Email of customer with CustomerID 101 to "alice.brown@example.com" in the Customers table.

**UPDATE** customers

**SET** email="alice.brown@example.com"

**WHERE** customer\_id=1

1. Decrease the TotalAmount of order with OrderID 2 to $750 in the Orders table.

**UPDATE** orders

**SET** Total\_amount=750

**WHERE** order\_id=2

1. Update the Department of employee with ID 4 to "Operations" in the Employees table.

**UPDATE** employees

**SET** depertment="Operations"

**WHERE** id=4

1. Set the Price of all products in the Products table to $100 where Price is currently less than $100.

**UPDATE** products

**SET** price=100

**WHERE** price<100;

1. Update the Email of all customers in the Customers table where Email contains "example" to end with "@company.com".

**UPDATE** customers

**SET** email=**REPLACE**(email,"example","company")

**WHERE** email **LIKE** '%example%';

1. Increase the Salary of all employees in the Employees table by 10%.

**UPDATE** employees

**SET** salary=salary+salary\*0.1;

1. Update the TotalAmount of all orders in the Orders table by adding a 5% tax.

**UPDATE** orders

**SET** total\_amount=total\_amount\*1.05

1. Set the Department of all employees in the Employees table to "Admin" where Age is less than 30.

**UPDATE** employees

**SET** depertment ="Admin"

**WHERE** age<30;