

SQL Task – 2

```
CREATE TABLE Products (  
    ProductID INT AUTO_INCREMENT PRIMARY KEY,  
    ProductName VARCHAR(255) NOT NULL,  
    Category VARCHAR(100),  
    Rating DECIMAL(2,1) CHECK (Rating BETWEEN 0 AND 5),  
    Price DECIMAL(10,2) NOT NULL CHECK (Price >= 0),  
    SaleDate DATE NOT NULL  
);  
  
INSERT INTO Products (ProductName, Category, Rating, Price, SaleDate)  
VALUES  
('Echo Dot (4th Gen)', 'Electronics', 4.5, 49.99, '2025-10-01'),  
('Fire TV Stick 4K', 'Electronics', 4.7, 39.99, '2025-10-02'),  
('Kindle Paperwhite', 'Books', 4.8, 129.99, '2025-09-28'),  
('Amazon Basics Laptop Bag', 'Accessories', 4.3, 24.99, '2025-09-30'),  
('Wireless Mouse', 'Computers', 4.2, 19.49, '2025-10-03'),  
('HP Pavilion Laptop', 'Computers', 4.4, 599.99, '2025-09-25'),  
('Samsung Galaxy S23', 'Mobiles', 4.6, 749.99, '2025-09-27'),  
('Apple iPhone 15', 'Mobiles', 4.9, 999.99, '2025-09-29'),  
('Sony WH-1000XM5 Headphones', 'Electronics', 4.8, 349.99, '2025-10-02'),  
('JBL Flip 6 Speaker', 'Electronics', 4.6, 119.99, '2025-10-01'),  
('ASUS ROG Gaming Mouse', 'Computers', 4.5, 59.99, '2025-09-26'),  
('Dell Wireless Keyboard', 'Computers', 4.3, 29.99, '2025-10-03'),  
('Logitech C920 Webcam', 'Computers', 4.7, 89.99, '2025-09-24'),  
('Amazon Echo Show 8', 'Electronics', 4.6, 129.99, '2025-09-23'),  
('Instant Pot Duo 7-in-1', 'Home Appliances', 4.5, 99.99, '2025-10-02'),  
('Philips Air Fryer', 'Home Appliances', 4.4, 149.99, '2025-10-01'),  
('Dyson V11 Vacuum Cleaner', 'Home Appliances', 4.8, 599.99, '2025-09-22'),
```

('Nike Running Shoes', 'Fashion', 4.6, 89.99, '2025-09-25'),
('Adidas Sports T-shirt', 'Fashion', 4.3, 29.99, '2025-09-29'),
('Levi's Jeans', 'Fashion', 4.4, 59.99, '2025-09-30'),
('Puma Backpack', 'Accessories', 4.2, 49.99, '2025-10-02'),
('Apple Watch Series 9', 'Wearables', 4.9, 399.99, '2025-10-01'),
('Samsung Galaxy Watch 6', 'Wearables', 4.7, 349.99, '2025-09-28'),
('Fitbit Charge 6', 'Wearables', 4.5, 149.99, '2025-09-26'),
('Canon EOS 250D DSLR', 'Cameras', 4.8, 699.99, '2025-09-27'),
('GoPro Hero 12', 'Cameras', 4.7, 399.99, '2025-09-25'),
('Sandisk 1TB SSD', 'Computers', 4.6, 89.99, '2025-09-24'),
('Seagate 2TB Hard Drive', 'Computers', 4.4, 69.99, '2025-09-23'),
('Boat Rockerz 550 Headphones', 'Electronics', 4.3, 49.99, '2025-09-22'),
('Mi Smart Band 8', 'Wearables', 4.4, 39.99, '2025-09-21');

SELECT * FROM Products;

ARITHMETIC OPERATORS

SELECT ProductName,
 Price,
 Price + (Price * 0.10) AS Price_With_Tax
FROM Products;

SELECT ProductName,
 Price,
 Price - (Price * 0.20) AS Discounted_Price
FROM Products;

SELECT ProductName,
 Price,

```
    Rating,  
    Price / Rating AS Price_Per_Rating  
FROM Products;
```

```
SELECT ProductName,  
    Price,  
    Price + 50 AS Increased_Price
```

```
FROM Products;
```

```
SELECT ProductName,  
    Price,  
    Price % 10 AS Price_Remainder
```

```
FROM Products;
```

COMPARISION OPERATORS

```
SELECT *  
FROM Products  
WHERE Price > 500;
```

```
SELECT ProductName, Rating, Price  
FROM Products  
WHERE Rating = 4.8;
```

```
SELECT ProductName, SaleDate, Price  
FROM Products  
WHERE SaleDate >= '2025-10-01';
```

LOGICAL OPERATORS

```
SELECT ProductName, Category, Price
```

```
FROM Products  
WHERE Category = 'Electronics' AND Price > 100;
```

```
SELECT ProductName, Rating, Price  
FROM Products  
WHERE Rating = 4.5 OR Price < 50;
```

```
SELECT ProductName, Category  
FROM Products  
WHERE NOT Category = 'Fashion';
```

```
SELECT ProductName, Category, Rating, Price  
FROM Products  
WHERE Category = 'Home Appliances' AND Rating >= 4.5 AND Price < 200;
```

SPECIAL OPERATORS

```
SELECT ProductName, Category, Price  
FROM Products  
WHERE Category IN ('Electronics', 'Computers');
```

```
SELECT ProductName, Category, Price  
FROM Products  
WHERE Category NOT IN ('Fashion', 'Accessories');
```

```
SELECT ProductName, Category  
FROM Products  
WHERE ProductName LIKE 'A%';
```

```
SELECT ProductName, SaleDate  
FROM Products  
WHERE SaleDate IS NOT NULL;
```

AGGERGATORS

```
SELECT COUNT(*) AS TotalProducts  
FROM Products;
```

```
SELECT AVG(Price) AS AveragePrice  
FROM Products;
```

```
SELECT MAX(Price) AS HighestPrice  
FROM Products;
```

```
SELECT MIN(Price) AS LowestPrice  
FROM Products;
```