Products Table

The Products table contains details about products, including their names, categories, and unit prices. It provides reference data for linking product information to sales transactions.

Query:

```
-- Create Products table

CREATE TABLE Products (
   product_id INT PRIMARY KEY,
   product_name VARCHAR(100),
   category VARCHAR(50),
   unit_price DECIMAL(10, 2)
);

-- Insert sample data into Products table

INSERT INTO Products (product_id, product_name, category, unit_price) VALUES
(101, 'Laptop', 'Electronics', 500.00),
(102, 'Smartphone', 'Electronics', 300.00),
(103, 'Headphones', 'Electronics', 30.00),
(104, 'Keyboard', 'Electronics', 20.00),
(105, 'Mouse', 'Electronics', 15.00);
```

1. Retrieve all columns from the product table.

2. Retrieve the product_name and unit_price from the Products table.

3. Filter the Products table to show only products in the 'Electronics' category.

4. Retrieve the product_id and product_name from the Products table for products with a unit_price greater than $100.

5. Calculate the average unit_price of products in the Products table.

6. Retrieve product_name and unit_price from the Products table with the Highest Unit Price

7. Retrieve the product_name and unit_price from the Products table, ordering the results by unit_price in descending order.

8. Retrieve the product_name and unit_price from the Products table, filtering the unit_price to show only values between $20 and $600.

9. Retrieve the product_name and category from the Products table, ordering the results by category in ascending order.

```
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    product_id INT PRIMARY KEY,
    product_name VARCHAR(100),
    category VARCHAR(50),
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-- Insert sample data into Products table
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(104, 'Keyboard', 'Electronics', 20.00),
(105, 'Mouse', 'Electronics', 15.00);

-- 1. Retrieve all columns from the product table
SELECT * FROM Products;

-- 2. Retrieve the product_name and unit_price from the Products table
SELECT product_name, unit_price FROM Products;

-- 3. Filter the Products table to show only products in the 'Electronics' category
SELECT * FROM Products
WHERE category = 'Electronics';

-- 4. Retrieve the product_id and product_name from the Products table for products with a unit_price greater than $100
SELECT product_id, product_name FROM Products
```

```
WHERE unit_price > 100;


-- 5. Calculate the average unit_price of products in the Products table
SELECT AVG(unit_price) AS average_unit_price FROM Products;


-- 6. Retrieve product_name and unit_price from the Products table with the Highest Unit Price
SELECT product_name, unit_price FROM Products
WHERE unit_price = (SELECT MAX(unit_price) FROM Products);


-- 7. Retrieve the product_name and unit_price from the Products table, ordering the results by unit_price in descending order
SELECT product_name, unit_price FROM Products
ORDER BY unit_price DESC;


-- 8. Retrieve the product_name and unit_price from the Products table, filtering the unit_price to show only values between $20 and $600
SELECT product_name, unit_price FROM Products
WHERE unit_price BETWEEN 20 AND 600;


-- 9. Retrieve the product_name and category from the Products table, ordering the results by category in ascending order
SELECT product_name, category FROM Products
ORDER BY category ASC;
```