SQL PRACTICE -2

Products Table

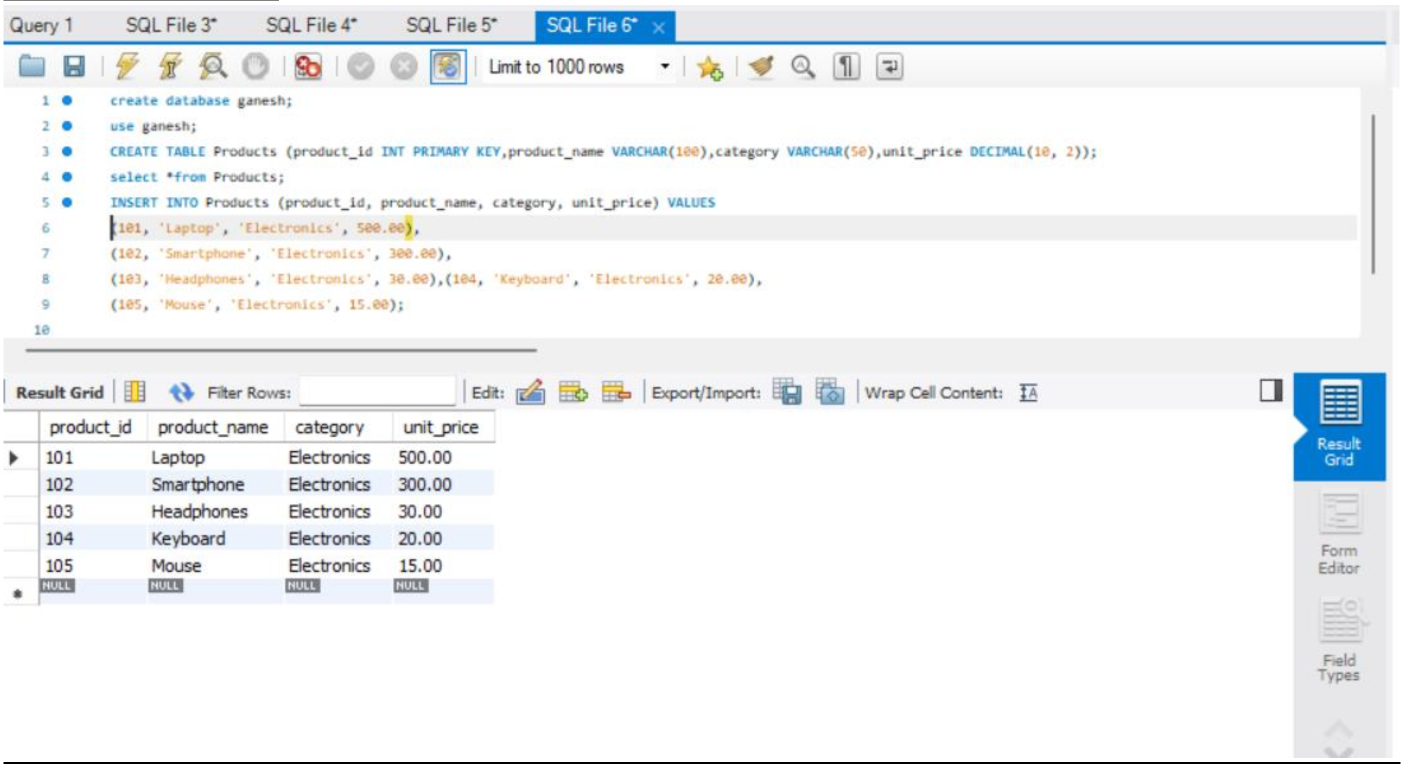
The Products table contains details about products, including their names, categories, and unit prices. It provides reference data for linking product information to sales transactions.

1. Retrieve all columns from the product table.

QUERY:

```
create database ganesh;

use ganesh;

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

select *from Products;

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);
```

QUERY WITH OUTPUT:



```
create database ganesh;
use ganesh;
CREATE TABLE Products (product_id INT PRIMARY KEY,product_name VARCHAR(100),category VARCHAR(50),unit_price DECIMAL(10, 2));
select *from Products;
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);
```

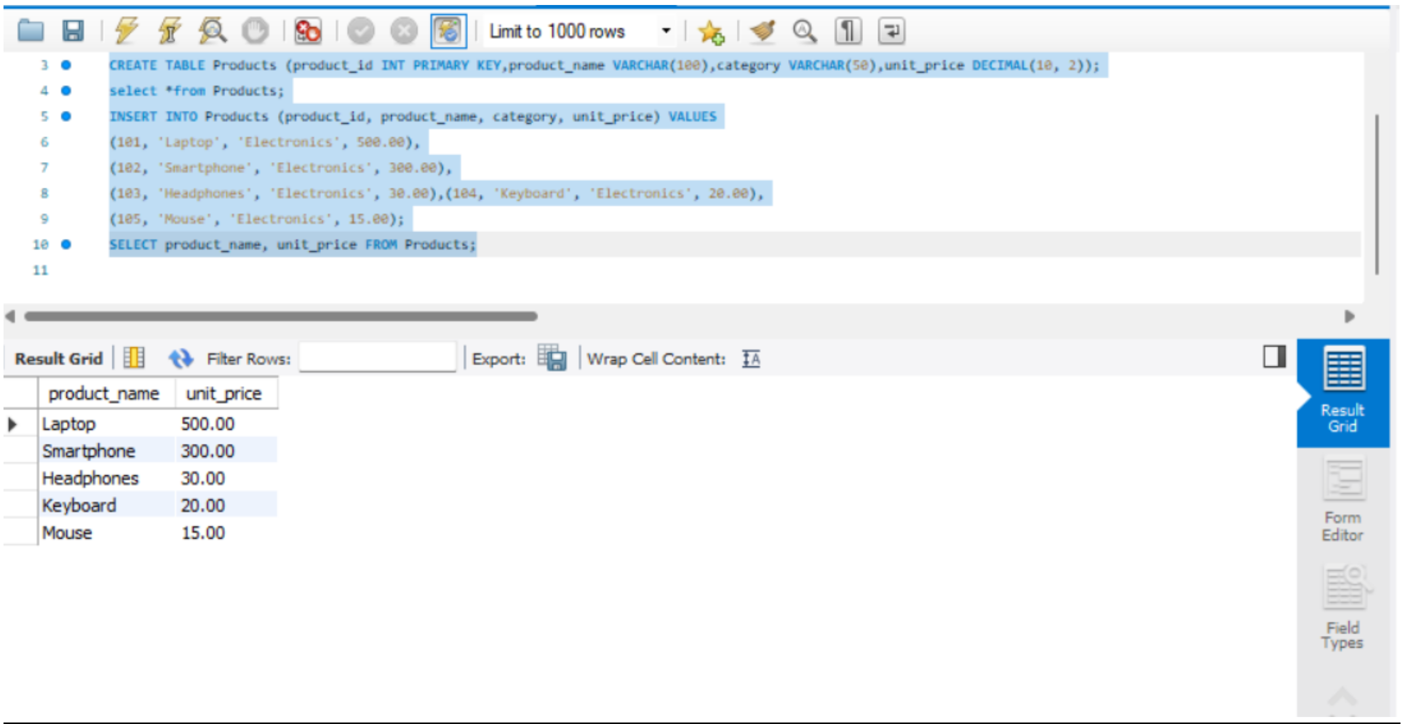
product_id	product_name	category	unit_price
101	Laptop	Electronics	500.00
102	Smartphone	Electronics	300.00
103	Headphones	Electronics	30.00
104	Keyboard	Electronics	20.00
105	Mouse	Electronics	15.00
NULL	NULL	NULL	NULL

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

QUERY:

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

select *from Products;

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);

SELECT product_name, unit_price FROM Products;
```

QUERY WITH OUTPUT:



```
CREATE TABLE Products (product_id INT PRIMARY KEY,product_name VARCHAR(100),category VARCHAR(50),unit_price DECIMAL(10, 2));
select *from Products;
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);
SELECT product_name, unit_price FROM Products;
```

product_name	unit_price
Laptop	500.00
Smartphone	300.00
Headphones	30.00
Keyboard	20.00
Mouse	15.00

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

QUERY:

create database ganesh;

use ganesh;

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

select *from Products;

INSERT INTO Products (product_id, product_name, category, unit_price) VALUES

(101, 'Laptop', 'Electronics', 500.00),

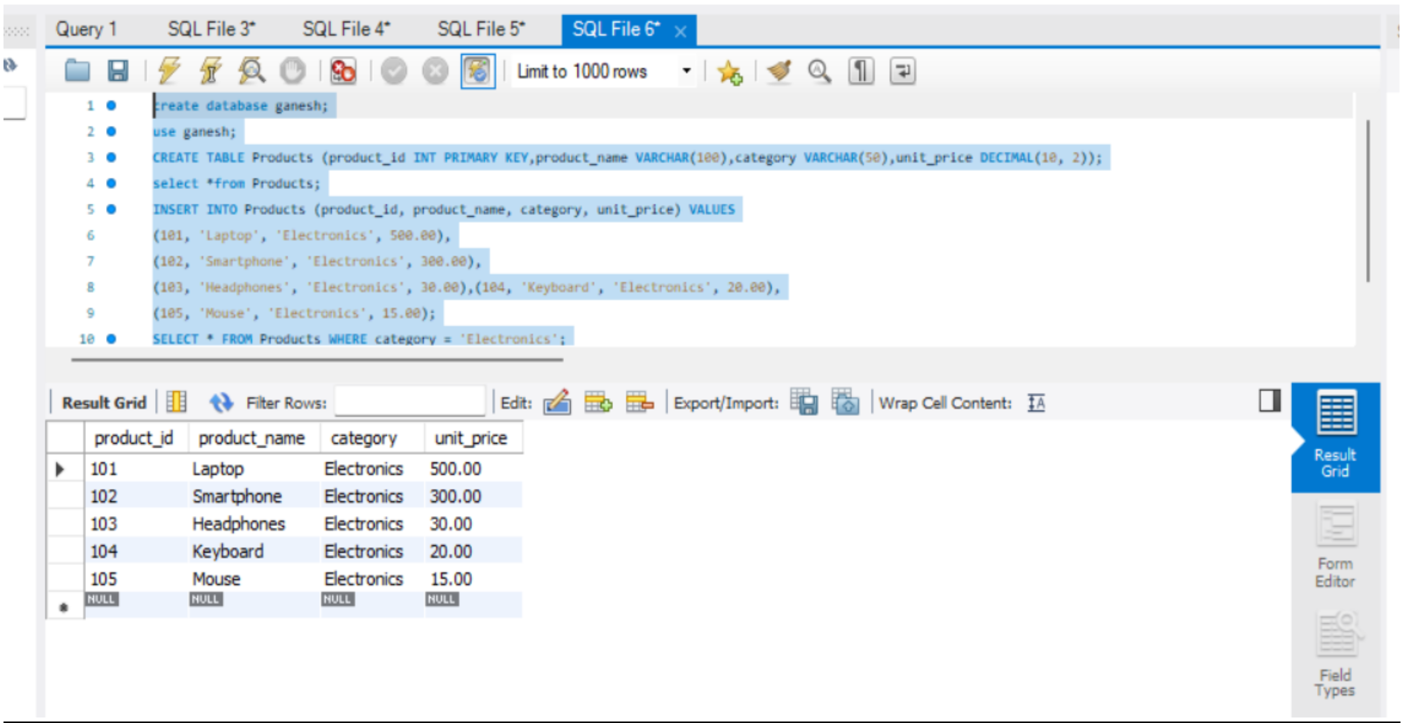
(102, 'Smartphone', 'Electronics', 300.00),

(103, 'Headphones', 'Electronics', 30.00),(104, 'Keyboard', 'Electronics', 20.00),

(105, 'Mouse', 'Electronics', 15.00);

SELECT * FROM Products WHERE category = 'Electronics';

QUERY WITH OUTPUT:



```
create database ganesh;
use ganesh;
CREATE TABLE Products (product_id INT PRIMARY KEY,product_name VARCHAR(100),category VARCHAR(50),unit_price DECIMAL(10, 2));
select *from Products;
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);
SELECT * FROM Products WHERE category = 'Electronics';
```

product_id	product_name	category	unit_price
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
NULL	NULL	NULL	NULL

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

QUERY:

create database ganesh;

use ganesh;

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

select *from Products;

INSERT INTO Products (product_id, product_name, category, unit_price) VALUES

(101, 'Laptop', 'Electronics', 500.00),

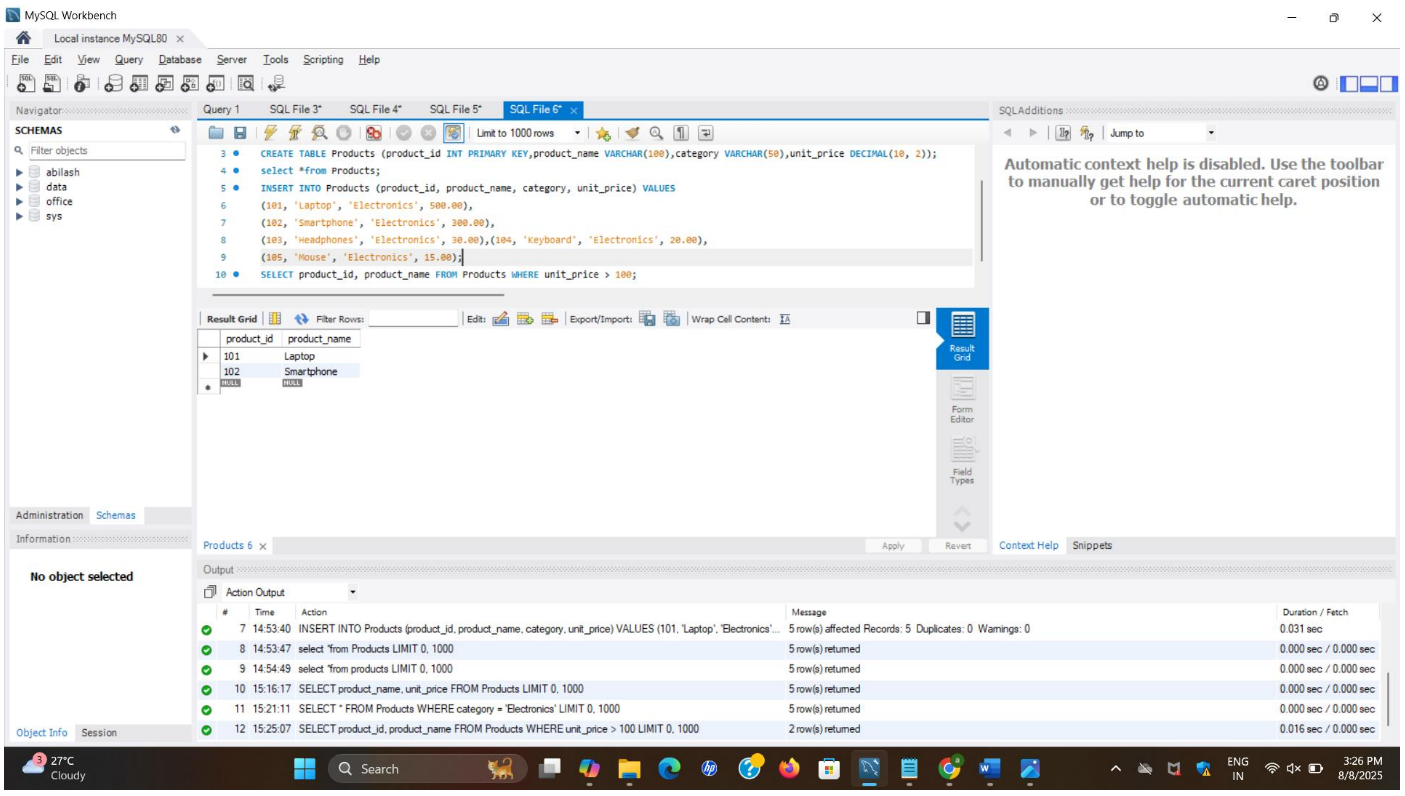
(102, 'Smartphone', 'Electronics', 300.00),

(103, 'Headphones', 'Electronics', 30.00),(104, 'Keyboard', 'Electronics', 20.00),

(105, 'Mouse', 'Electronics', 15.00);

SELECT product_id, product_name FROM Products WHERE unit_price > 100;

QUERY WITH OUTPUT:



```
CREATE TABLE Products (product_id INT PRIMARY KEY,product_name VARCHAR(100),category VARCHAR(50),unit_price DECIMAL(10, 2));
select *from Products;
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);
SELECT product_id, product_name FROM Products WHERE unit_price > 100;
```

product_id	product_name
101	Laptop
102	Smartphone
NULL	NULL

```
#   Time      Action                                                                                          Message                                                       Duration / Fetch
7   14:53:40  INSERT INTO Products (product_id, product_name, category, unit_price) VALUES (101, 'Laptop', 'Electronics'...  5 row(s) affected Records: 5  Duplicates: 0  Warnings: 0  0.031 sec
8   14:53:47  select *from Products LIMIT 0, 1000                                                             5 row(s) returned                                             0.000 sec / 0.000 sec
9   14:54:49  select *from products LIMIT 0, 1000                                                             5 row(s) returned                                             0.000 sec / 0.000 sec
10  15:16:17  SELECT product_name, unit_price FROM Products LIMIT 0, 1000                                     5 row(s) returned                                             0.000 sec / 0.000 sec
11  15:21:11  SELECT * FROM Products WHERE category = 'Electronics' LIMIT 0, 1000                             5 row(s) returned                                             0.000 sec / 0.000 sec
12  15:25:07  SELECT product_id, product_name FROM Products WHERE unit_price > 100 LIMIT 0, 1000               2 row(s) returned                                             0.016 sec / 0.000 sec
```

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

QUERY:

create database ganesh;

use ganesh;

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

select *from Products;

INSERT INTO Products (product_id, product_name, category, unit_price) VALUES

(101, 'Laptop', 'Electronics', 500.00),

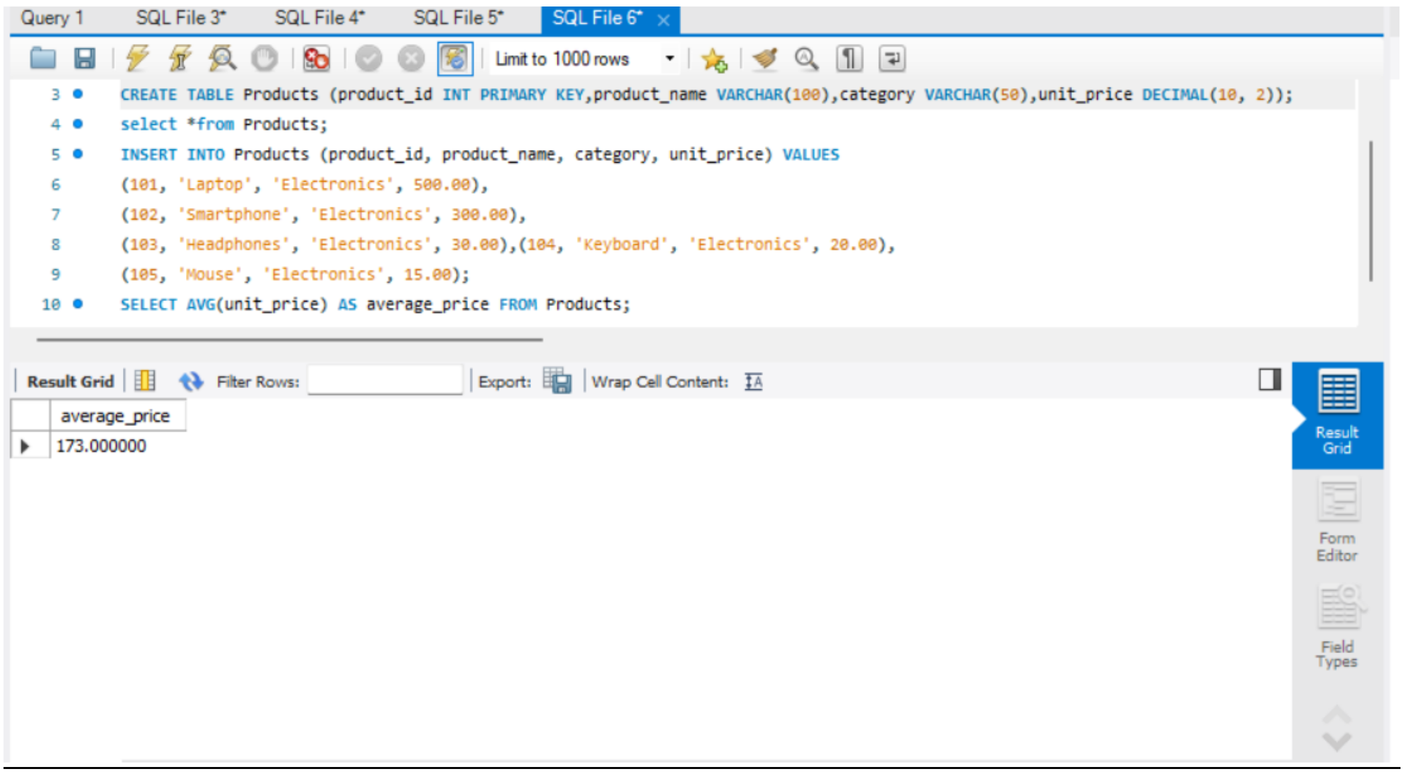
(102, 'Smartphone', 'Electronics', 300.00),

(103, 'Headphones', 'Electronics', 30.00),(104, 'Keyboard', 'Electronics', 20.00),

(105, 'Mouse', 'Electronics', 15.00);

SELECT AVG(unit_price) AS average_price FROM Products;

QUERY WITH OUTPUT:



```
CREATE TABLE Products (product_id INT PRIMARY KEY,product_name VARCHAR(100),category VARCHAR(50),unit_price DECIMAL(10, 2));
select *from Products;
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);
SELECT AVG(unit_price) AS average_price FROM Products;
```

average_price
173.000000

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

QUERY:

create database ganesh;

use ganesh;

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

select *from Products;

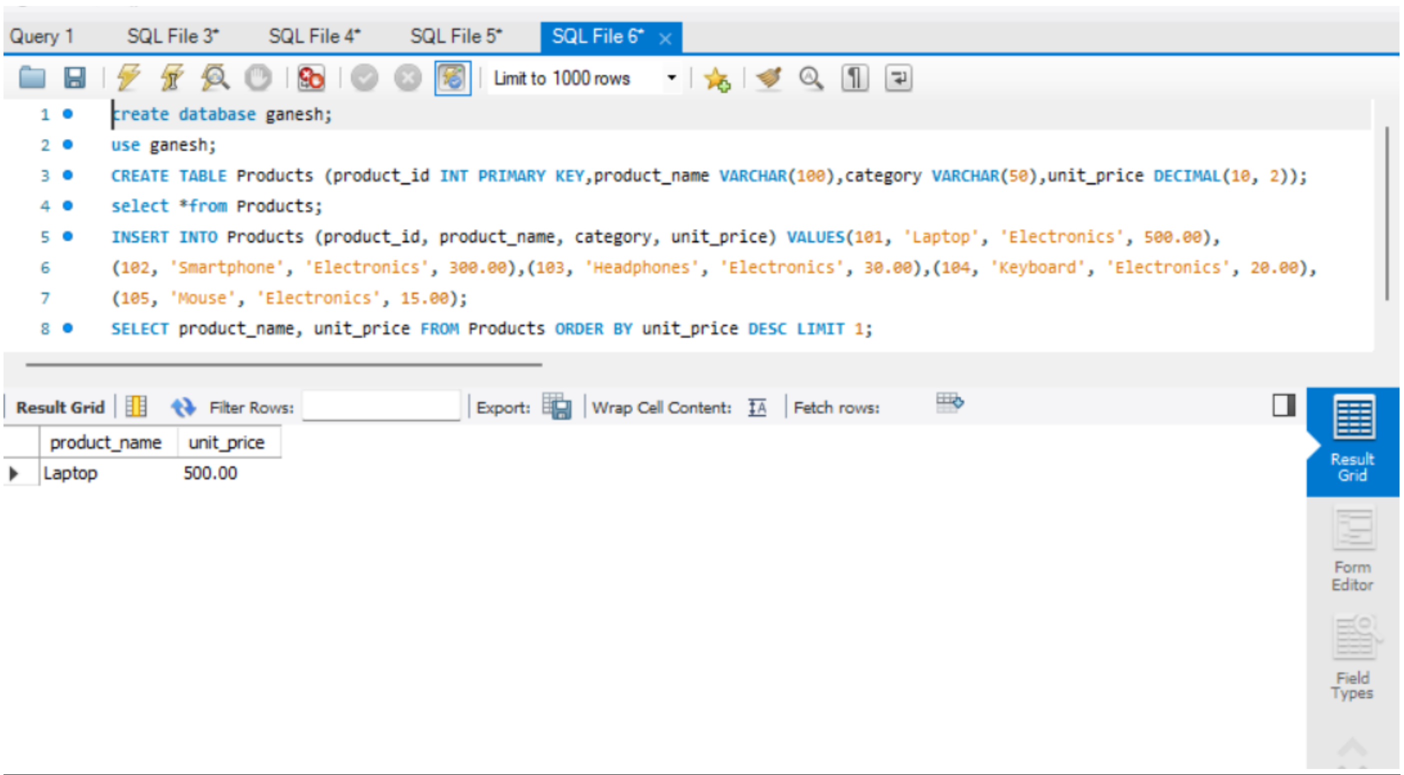
INSERT INTO Products (product_id, product_name, category, unit_price) VALUES(101, 'Laptop', 'Electronics', 500.00),

(102, 'Smartphone', 'Electronics', 300.00),(103, 'Headphones', 'Electronics', 30.00),(104, 'Keyboard', 'Electronics', 20.00),

(105, 'Mouse', 'Electronics', 15.00);

SELECT product_name, unit_price FROM Products ORDER BY unit_price DESC LIMIT 1;

QUERY WITH OUTPUT:



```
create database ganesh;
use ganesh;
CREATE TABLE Products (product_id INT PRIMARY KEY,product_name VARCHAR(100),category VARCHAR(50),unit_price DECIMAL(10, 2));
select *from Products;
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);
SELECT product_name, unit_price FROM Products ORDER BY unit_price DESC LIMIT 1;
```

product_name	unit_price
Laptop	500.00

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

QUERY:

create database ganesh;

use ganesh;

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

select *from Products;

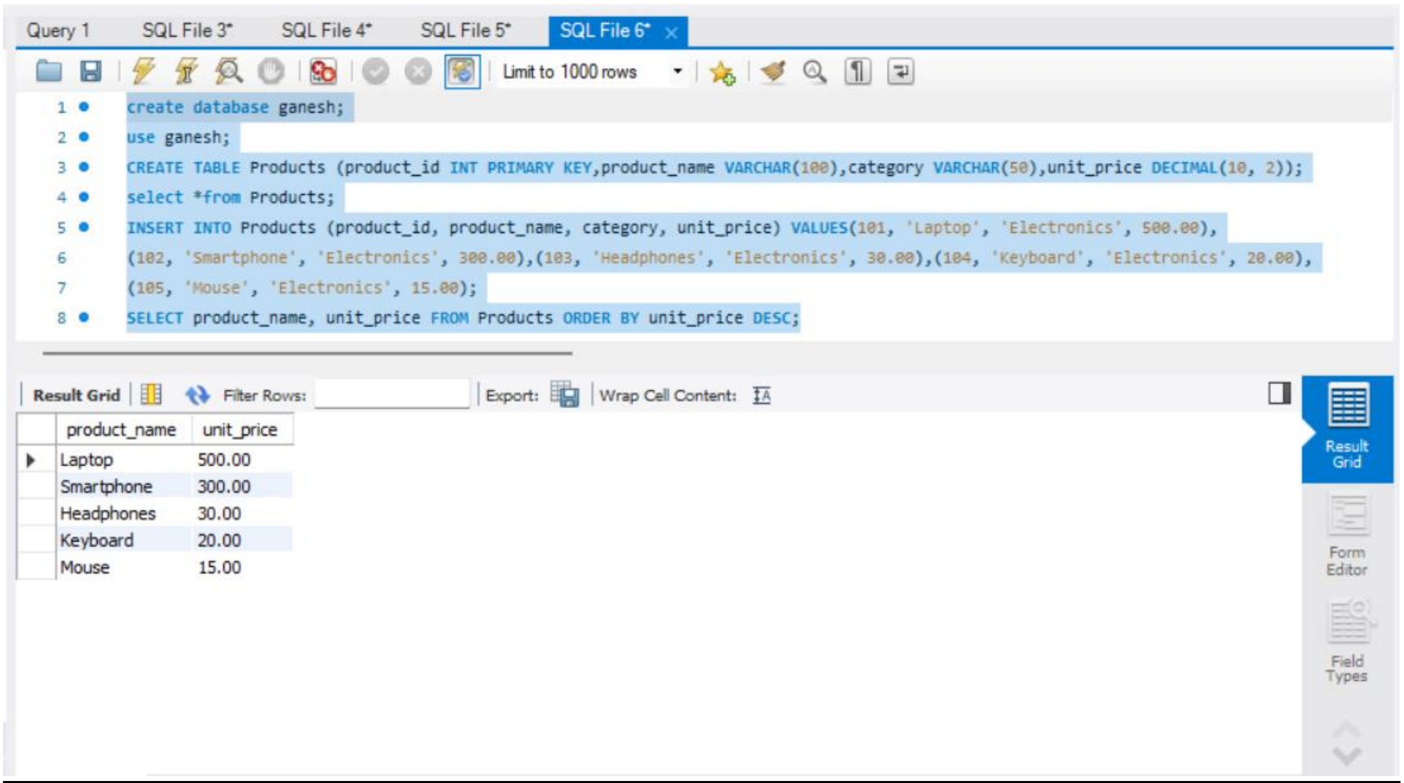
INSERT INTO Products (product_id, product_name, category, unit_price) VALUES(101, 'Laptop', 'Electronics', 500.00),

(102, 'Smartphone', 'Electronics', 300.00),(103, 'Headphones', 'Electronics', 30.00),(104, 'Keyboard', 'Electronics', 20.00),

(105, 'Mouse', 'Electronics', 15.00);

SELECT product_name, unit_price FROM Products ORDER BY unit_price DESC;

QUERY WITH OUTPUT:



```
create database ganesh;
use ganesh;
CREATE TABLE Products (product_id INT PRIMARY KEY,product_name VARCHAR(100),category VARCHAR(50),unit_price DECIMAL(10, 2));
select *from Products;
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);
SELECT product_name, unit_price FROM Products ORDER BY unit_price DESC;
```

product_name	unit_price
Laptop	500.00
Smartphone	300.00
Headphones	30.00
Keyboard	20.00
Mouse	15.00

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

QUERY:

create database ganesh;

use ganesh;

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

select *from Products;

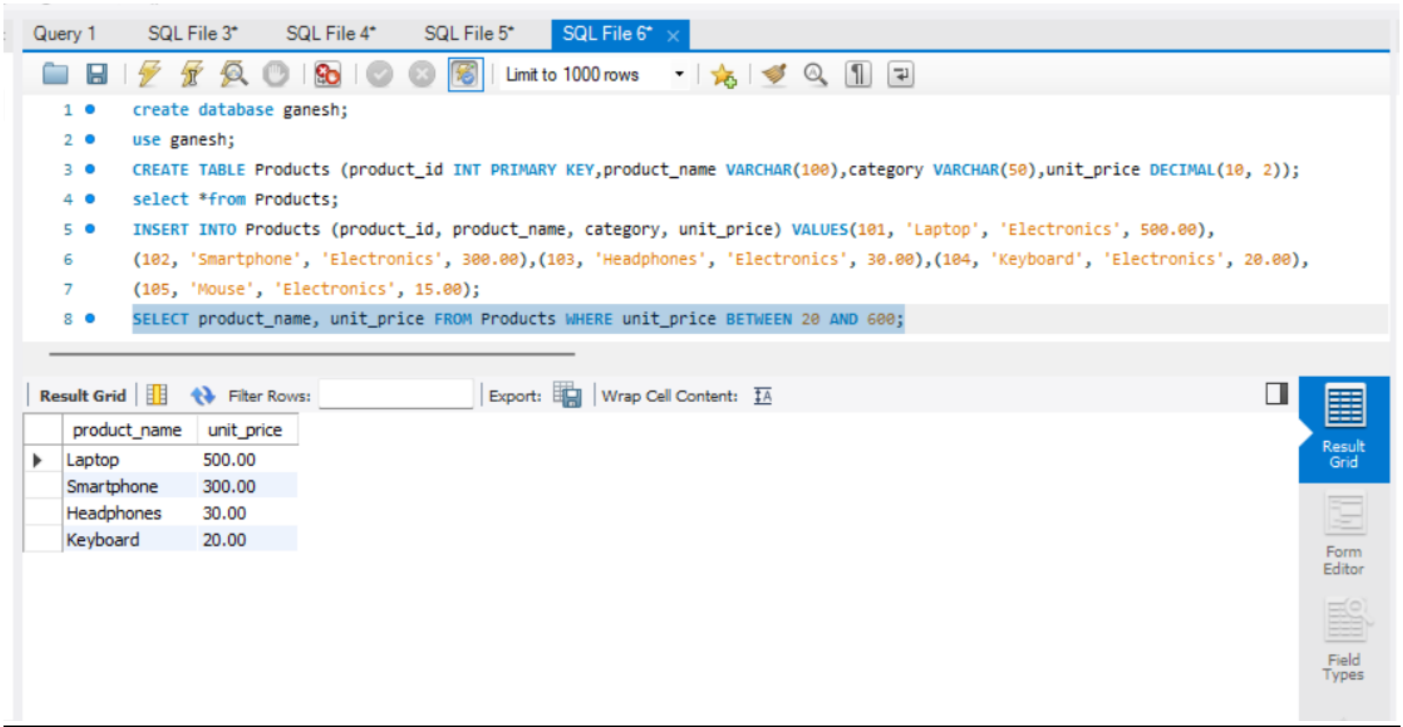
INSERT INTO Products (product_id, product_name, category, unit_price) VALUES(101, 'Laptop', 'Electronics', 500.00),

(102, 'Smartphone', 'Electronics', 300.00),(103, 'Headphones', 'Electronics', 30.00),(104, 'Keyboard', 'Electronics', 20.00),

(105, 'Mouse', 'Electronics', 15.00);

SELECT product_name, unit_price FROM Products WHERE unit_price BETWEEN 20 AND 600;

QUERY WITH OUTPUT:



```
create database ganesh;
use ganesh;
CREATE TABLE Products (product_id INT PRIMARY KEY,product_name VARCHAR(100),category VARCHAR(50),unit_price DECIMAL(10, 2));
select *from Products;
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);
SELECT product_name, unit_price FROM Products WHERE unit_price BETWEEN 20 AND 600;
```

product_name	unit_price
Laptop	500.00
Smartphone	300.00
Headphones	30.00
Keyboard	20.00

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

QUERY:

create database ganesh;

use ganesh;

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

select *from Products;

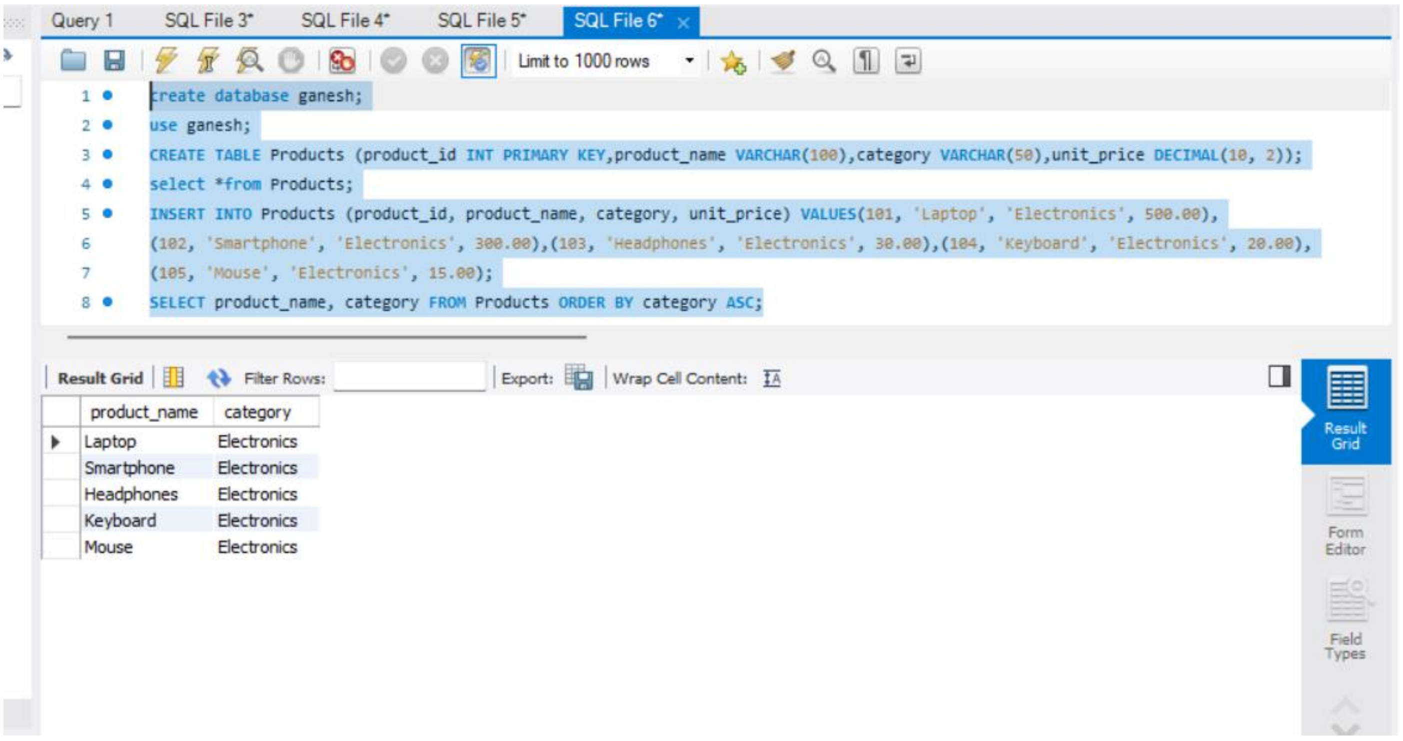
INSERT INTO Products (product_id, product_name, category, unit_price) VALUES(101, 'Laptop', 'Electronics', 500.00),

(102, 'Smartphone', 'Electronics', 300.00),(103, 'Headphones', 'Electronics', 30.00),(104, 'Keyboard', 'Electronics', 20.00),

(105, 'Mouse', 'Electronics', 15.00);

SELECT product_name, category FROM Products ORDER BY category ASC;

QUERY WITH OUTPUT:



```
create database ganesh;
use ganesh;
CREATE TABLE Products (product_id INT PRIMARY KEY,product_name VARCHAR(100),category VARCHAR(50),unit_price DECIMAL(10, 2));
select *from Products;
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);
SELECT product_name, category FROM Products ORDER BY category ASC;
```

product_name	category
Laptop	Electronics
Smartphone	Electronics
Headphones	Electronics
Keyboard	Electronics
Mouse	Electronics

Sales Table

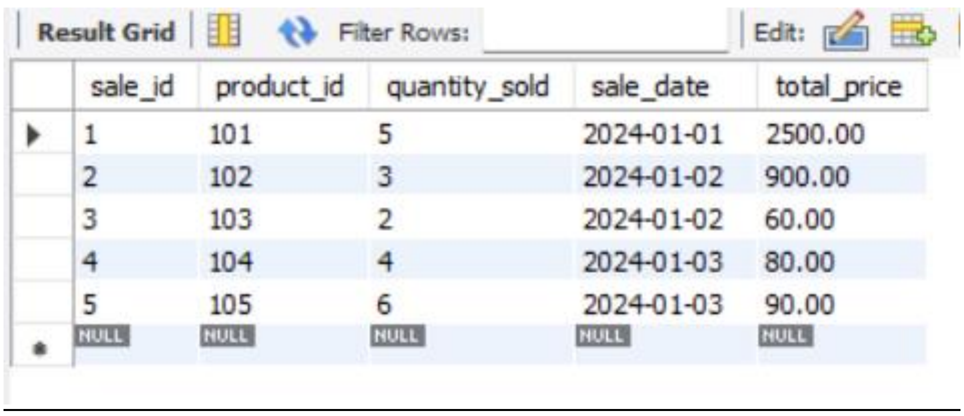
The Sales table records information about product sales, including the quantity sold, sale date, and total price for each sale. It serves as a transactional data source for analyzing sales trends.

1. Retrieve all columns from the Sales table.

QUERY:

```
create database ganesh;

use ganesh;

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

select *from Products;

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);

CREATE TABLE Sales (

sale_id INT PRIMARY KEY, product_id INT, quantity_sold INT, sale_date DATE, total_price DECIMAL(10, 2) ,foreign
key (product_id) REFERENCES

Products(product_id));

select *from sales;

INSERT INTO Sales (sale_id, product_id, quantity_sold, sale_date, total_price) VALUES

(1, 101, 5, '2024-01-01', 2500.00),(2, 102, 3, '2024-01-02', 900.00),(3, 103, 2, '2024-01-02', 60.00),

(4, 104, 4, '2024-01-03', 80.00),(5, 105, 6, '2024-01-03', 90.00);
```

QUERY WITH OUTPUT:



sale_id	product_id	quantity_sold	sale_date	total_price
1	101	5	2024-01-01	2500.00
2	102	3	2024-01-02	900.00
3	103	2	2024-01-02	60.00
4	104	4	2024-01-03	80.00
5	105	6	2024-01-03	90.00
NULL	NULL	NULL	NULL	NULL

2. Retrieve the sale_id and sale_date from the Sales table.

QUERY:

```
create database ganesh;

use ganesh;
```

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

select *from Products;

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);

CREATE TABLE Sales (

sale_id INT PRIMARY KEY, product_id INT, quantity_sold INT, sale_date DATE, total_price DECIMAL(10, 2) ,foreign key (product_id) REFERENCES

Products(product_id));

select *from sales;

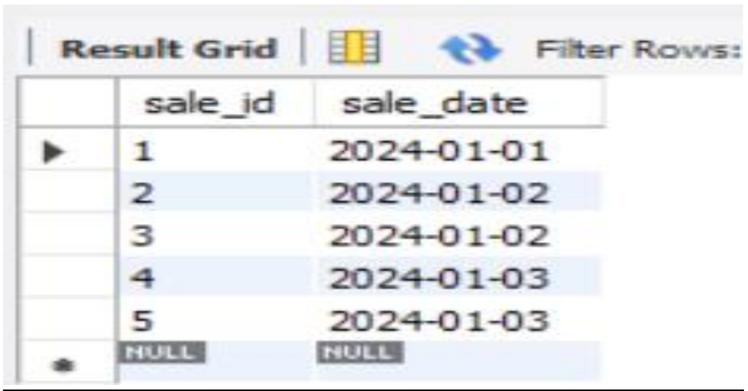
INSERT INTO Sales (sale_id, product_id, quantity_sold, sale_date, total_price) VALUES

(1, 101, 5, '2024-01-01', 2500.00),(2, 102, 3, '2024-01-02', 900.00),(3, 103, 2, '2024-01-02', 60.00),

(4, 104, 4, '2024-01-03', 80.00),(5, 105, 6, '2024-01-03', 90.00);

SELECT sale_id, sale_date FROM Sales;

QUERY WITH OUTPUT:



```
sale_id  sale_date
1        2024-01-01
2        2024-01-02
3        2024-01-02
4        2024-01-03
5        2024-01-03
NULL     NULL
```

3. Filter the Sales table to show only sales with a total_price greater than $100.

QUERY:

create database ganesh;

use ganesh;

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

select *from Products;

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);

CREATE TABLE Sales (

sale_id INT PRIMARY KEY, product_id INT, quantity_sold INT, sale_date DATE, total_price DECIMAL(10, 2) ,foreign key (product_id) REFERENCES

Products(product_id));

select *from sales;

INSERT INTO Sales (sale_id, product_id, quantity_sold, sale_date, total_price) VALUES

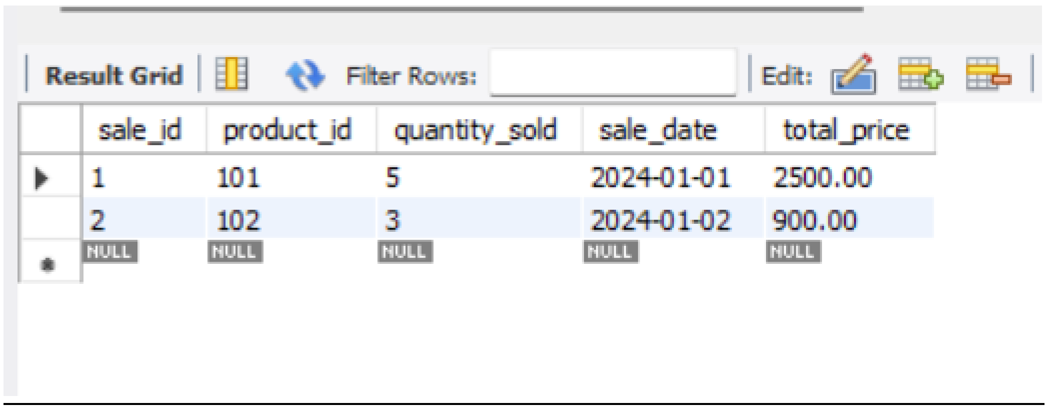
(1, 101, 5, '2024-01-01', 2500.00),(2, 102, 3, '2024-01-02', 900.00),(3, 103, 2, '2024-01-02', 60.00),

(4, 104, 4, '2024-01-03', 80.00),(5, 105, 6, '2024-01-03', 90.00);

SELECT * FROM Sales

WHERE total_price > 100;

<u>QUERY WITH OUTPUT:</u>



sale_id	product_id	quantity_sold	sale_date	total_price
1	101	5	2024-01-01	2500.00
2	102	3	2024-01-02	900.00
NULL	NULL	NULL	NULL	NULL

<u>4. Retrieve the sale_id and total_price from the Sales table for sales made on January 3, 2024.</u>

<u>QUERY:</u>

create database ganesh;

use ganesh;

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

select *from Products;

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);

CREATE TABLE Sales (

sale_id INT PRIMARY KEY, product_id INT, quantity_sold INT, sale_date DATE, total_price DECIMAL(10, 2) ,foreign key (product_id) REFERENCES

Products(product_id));

select *from sales;

INSERT INTO Sales (sale_id, product_id, quantity_sold, sale_date, total_price) VALUES

(1, 101, 5, '2024-01-01', 2500.00),(2, 102, 3, '2024-01-02', 900.00),(3, 103, 2, '2024-01-02', 60.00),

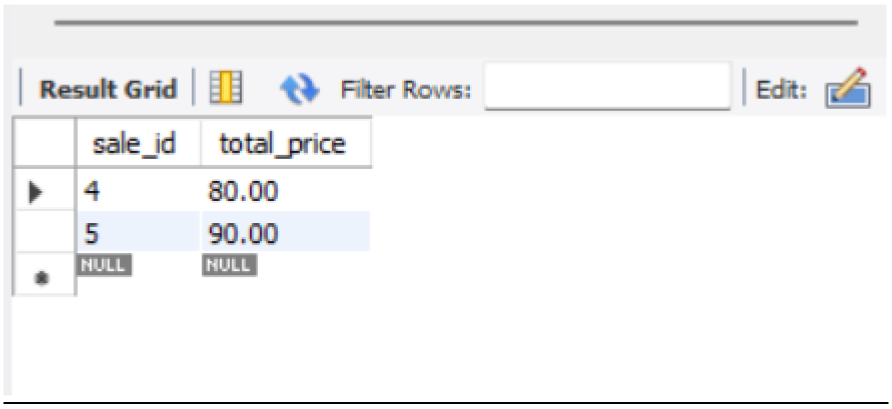
(4, 104, 4, '2024-01-03', 80.00),(5, 105, 6, '2024-01-03', 90.00);

SELECT sale_id, total_price

FROM Sales

WHERE sale_date = '2024-01-03';

QUERY WITH OUTPUT:



sale_id	total_price
4	80.00
5	90.00
NULL	NULL

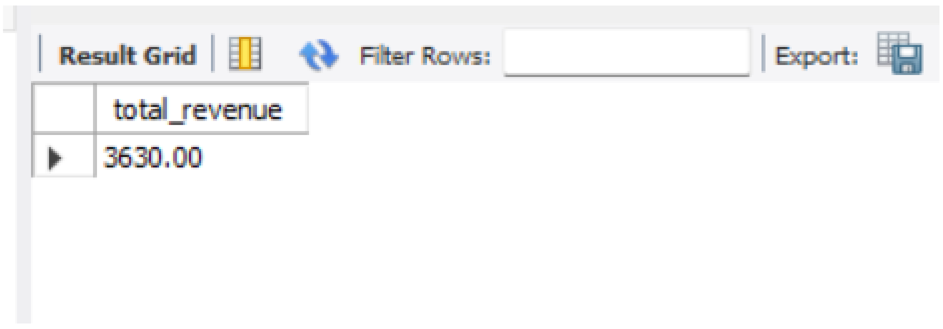
5. Calculate the total revenue generated from all sales in the Sales table.

QUERY:

create database ganesh;

```
use ganesh;

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

select *from Products;

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);

CREATE TABLE Sales (

sale_id INT PRIMARY KEY, product_id INT, quantity_sold INT, sale_date DATE, total_price DECIMAL(10, 2) ,foreign
key (product_id) REFERENCES

Products(product_id));

select *from sales;

INSERT INTO Sales (sale_id, product_id, quantity_sold, sale_date, total_price) VALUES

(1, 101, 5, '2024-01-01', 2500.00),(2, 102, 3, '2024-01-02', 900.00),(3, 103, 2, '2024-01-02', 60.00),

(4, 104, 4, '2024-01-03', 80.00),(5, 105, 6, '2024-01-03', 90.00);

SELECT SUM(total_price) AS total_revenue

FROM Sales;
```

QUERY WITH OUTPUT:



```
total_revenue
3630.00
```

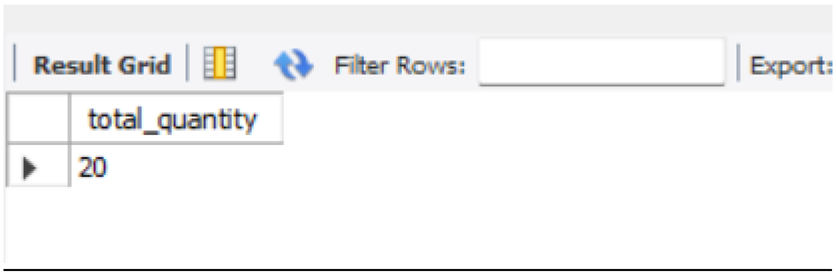
6. Calculate the total quantity_sold from the Sales table.

QUERY:

```
create database ganesh;

use ganesh;
```

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

select *from Products;

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);

CREATE TABLE Sales (

sale_id INT PRIMARY KEY, product_id INT, quantity_sold INT, sale_date DATE, total_price DECIMAL(10, 2) ,foreign
key (product_id) REFERENCES

Products(product_id));

select *from sales;

INSERT INTO Sales (sale_id, product_id, quantity_sold, sale_date, total_price) VALUES

(1, 101, 5, '2024-01-01', 2500.00),(2, 102, 3, '2024-01-02', 900.00),(3, 103, 2, '2024-01-02', 60.00),

(4, 104, 4, '2024-01-03', 80.00),(5, 105, 6, '2024-01-03', 90.00);

SELECT SUM(quantity_sold) AS total_quantity

FROM Sales;
```

QUERY WITH OUTPUT:



```
total_quantity
20
```

7. Retrieve the sale_id, product_id, and total_price from the Sales table for sales with a

quantity_sold greater than 4.

QUERY:

```
create database ganesh;

use ganesh;
```

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

select *from Products;

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);

CREATE TABLE Sales (

sale_id INT PRIMARY KEY, product_id INT, quantity_sold INT, sale_date DATE, total_price DECIMAL(10, 2) ,foreign key (product_id) REFERENCES

Products(product_id));

select *from sales;

INSERT INTO Sales (sale_id, product_id, quantity_sold, sale_date, total_price) VALUES

(1, 101, 5, '2024-01-01', 2500.00),(2, 102, 3, '2024-01-02', 900.00),(3, 103, 2, '2024-01-02', 60.00),

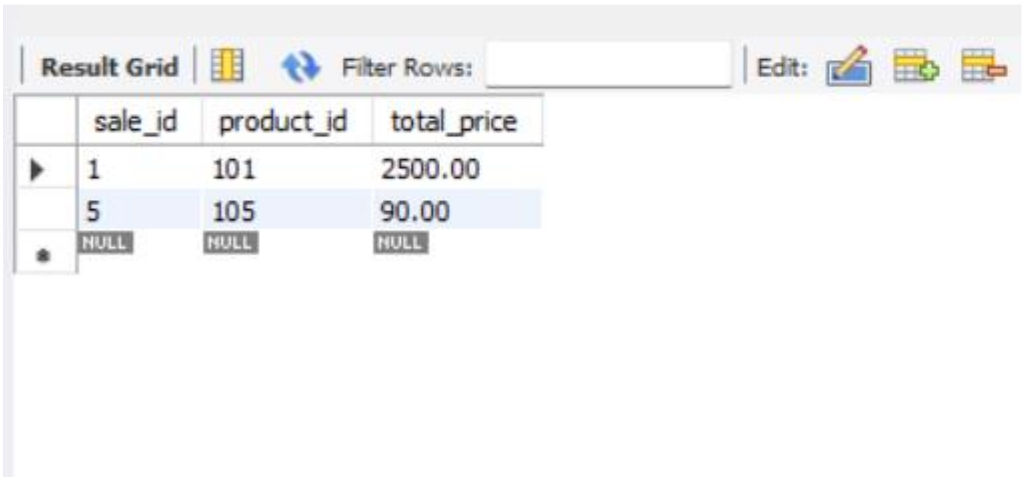
(4, 104, 4, '2024-01-03', 80.00),(5, 105, 6, '2024-01-03', 90.00);

SELECT sale_id, product_id, total_price

FROM Sales

WHERE quantity_sold > 4;

<u>QUERY WITH OUTPUT:</u>



sale_id	product_id	total_price
1	101	2500.00
5	105	90.00
NULL	NULL	NULL

<u>8. Calculate the average total_price of sales in the Sales table.</u>

<u>QUERY:</u>

create database ganesh;

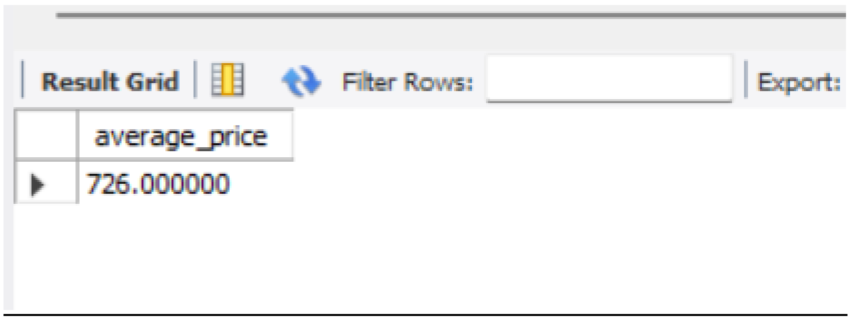
use ganesh;

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

select *from Products;

```
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);
CREATE TABLE Sales (
sale_id INT PRIMARY KEY, product_id INT, quantity_sold INT, sale_date DATE, total_price DECIMAL(10, 2) ,foreign key (product_id) REFERENCES
Products(product_id));
select *from sales;
INSERT INTO Sales (sale_id, product_id, quantity_sold, sale_date, total_price) VALUES
(1, 101, 5, '2024-01-01', 2500.00),(2, 102, 3, '2024-01-02', 900.00),(3, 103, 2, '2024-01-02', 60.00),
(4, 104, 4, '2024-01-03', 80.00),(5, 105, 6, '2024-01-03', 90.00);
SELECT AVG(total_price) AS average_price
FROM Sales;
```

QUERY WITH OUTPUT:



```
average_price
726.000000
```