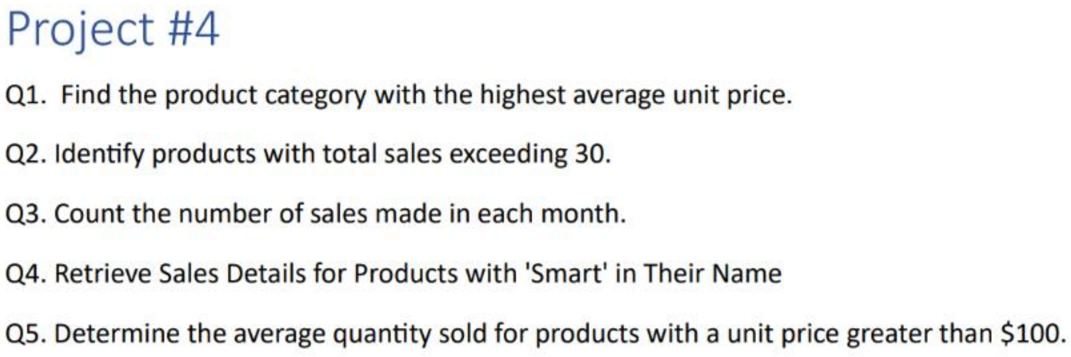
PROJECT 4



Project #4

Q1. Find the product category with the highest average unit price.

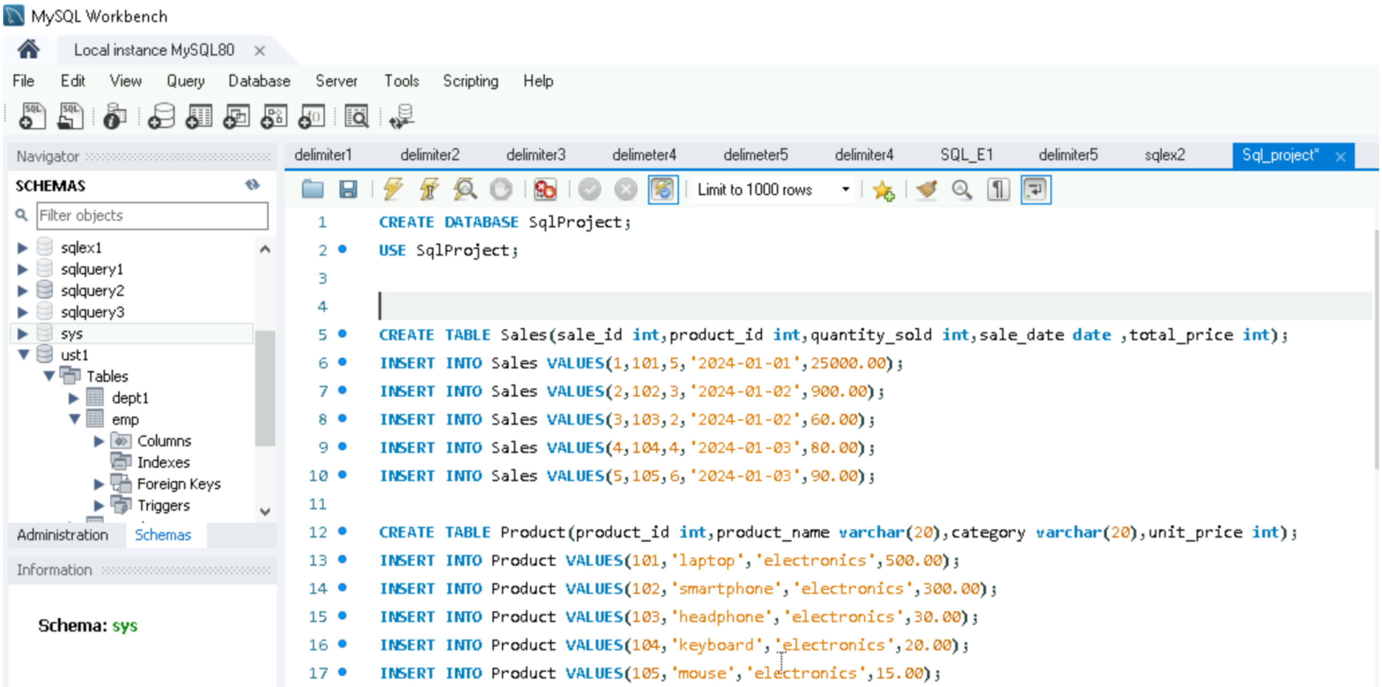
Q2. Identify products with total sales exceeding 30.

Q3. Count the number of sales made in each month.

Q4. Retrieve Sales Details for Products with 'Smart' in Their Name

Q5. Determine the average quantity sold for products with a unit price greater than $100.

CREATE DATABASE, CREATE TABLE AND INSERT VALUES:

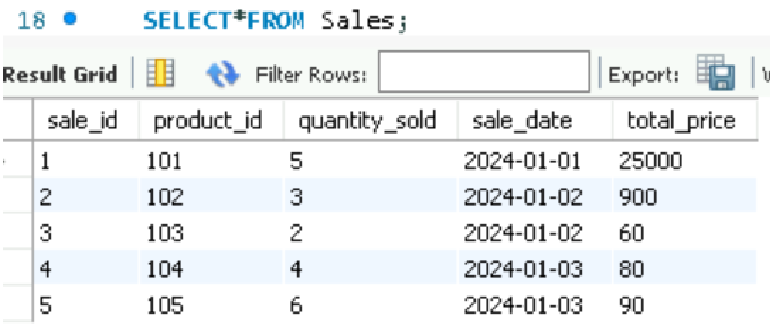


```sql
CREATE DATABASE SqlProject;
USE SqlProject;


CREATE TABLE Sales(sale_id int,product_id int,quantity_sold int,sale_date date ,total_price int);
INSERT INTO Sales VALUES(1,101,5,'2024-01-01',25000.00);
INSERT INTO Sales VALUES(2,102,3,'2024-01-02',900.00);
INSERT INTO Sales VALUES(3,103,2,'2024-01-02',60.00);
INSERT INTO Sales VALUES(4,104,4,'2024-01-03',80.00);
INSERT INTO Sales VALUES(5,105,6,'2024-01-03',90.00);

CREATE TABLE Product(product_id int,product_name varchar(20),category varchar(20),unit_price int);
INSERT INTO Product VALUES(101,'laptop','electronics',500.00);
INSERT INTO Product VALUES(102,'smartphone','electronics',300.00);
INSERT INTO Product VALUES(103,'headphone','electronics',30.00);
INSERT INTO Product VALUES(104,'keyboard','electronics',20.00);
INSERT INTO Product VALUES(105,'mouse','electronics',15.00);
```

Sales Table:

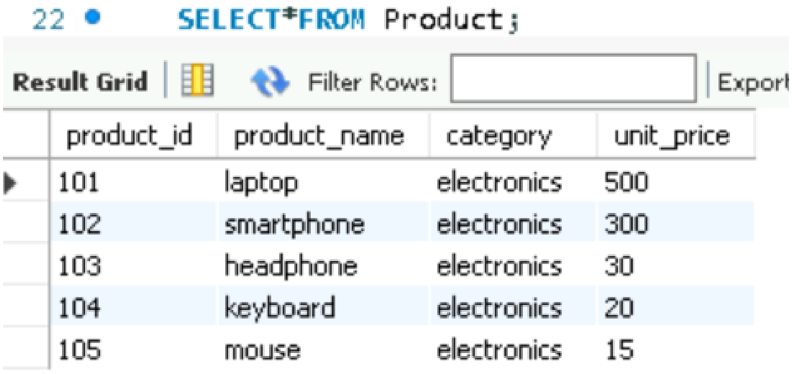


```sql
SELECT*FROM Sales;
```

sale_id	product_id	quantity_sold	sale_date	total_price
1	101	5	2024-01-01	25000
2	102	3	2024-01-02	900
3	103	2	2024-01-02	60
4	104	4	2024-01-03	80
5	105	6	2024-01-03	90

PROJECT 4

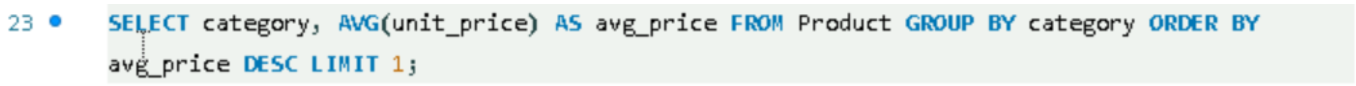
Product Table:



```
SELECT*FROM Product;
```

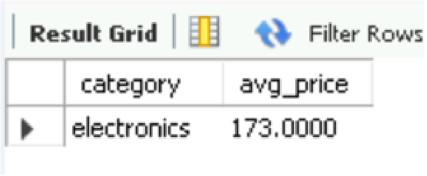
product_id	product_name	category	unit_price
101	laptop	electronics	500
102	smartphone	electronics	300
103	headphone	electronics	30
104	keyboard	electronics	20
105	mouse	electronics	15

1.QUERY:



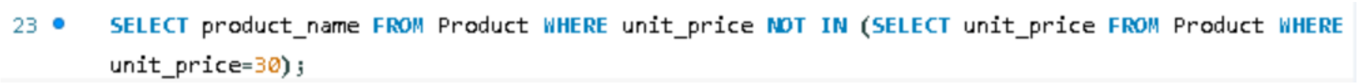
```
SELECT category, AVG(unit_price) AS avg_price FROM Product GROUP BY category ORDER BY
avg_price DESC LIMIT 1;
```

OUTPUT:



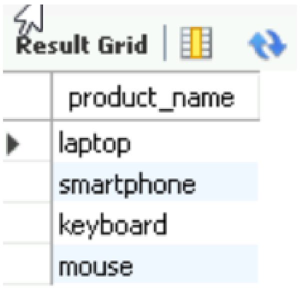
category	avg_price
electronics	173.0000

2.QUERY:



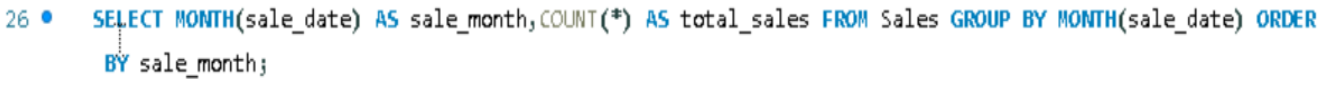
```
SELECT product_name FROM Product WHERE unit_price NOT IN (SELECT unit_price FROM Product WHERE
unit_price=30);
```

OUTPUT:



product_name
laptop
smartphone
keyboard
mouse

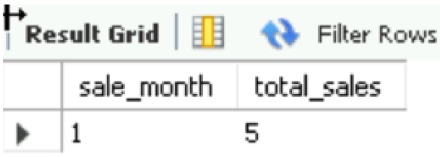
3.QUERY:



```
SELECT MONTH(sale_date) AS sale_month,COUNT(*) AS total_sales FROM Sales GROUP BY MONTH(sale_date) ORDER
BY sale_month;
```

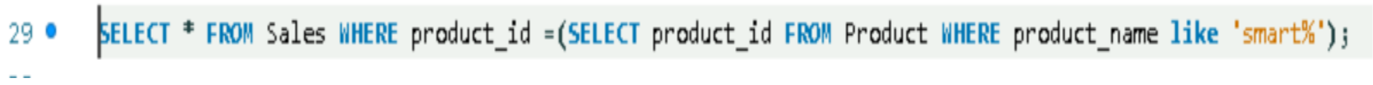
OUTPUT:

PROJECT 4



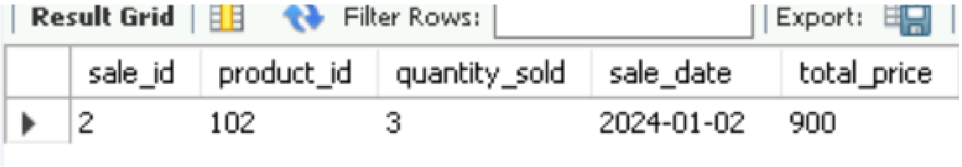
sale_month	total_sales
1	5

4.QUERY:



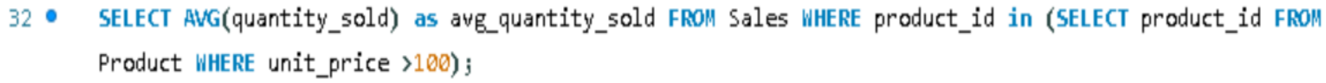
```sql
SELECT * FROM Sales WHERE product_id =(SELECT product_id FROM Product WHERE product_name like 'smart%');
```

OUTPUT:



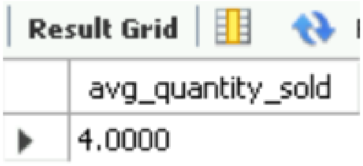
sale_id	product_id	quantity_sold	sale_date	total_price
2	102	3	2024-01-02	900

5.QUERY:



```sql
SELECT AVG(quantity_sold) as avg_quantity_sold FROM Sales WHERE product_id in (SELECT product_id FROM
Product WHERE unit_price >100);
```

OUTPUT:



avg_quantity_sold
4.0000