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Project Name: Fragrance Shop Management System

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Course Name: Advance Database Management System
Section: A

Faculty use only

FACULTYCOMMENTS	**Marks Obtained**	
	Total Marks	

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1.Introduction:

Fragrance Shop Management encompasses a series of well-coordinated tasks aimed at effectively running and supervising a retail business that specializes in selling fragrances. This process involves various activities such as interacting with customers, managing sales, controlling inventory, maintaining supplier relationships, and overall business ownership. Customers have the opportunity to explore and purchase fragrances, while the sales staff handles transactions and keeps the inventory up to date. Suppliers play a crucial role by providing fragrance details, while owners oversee and manage the entire system. The ultimate objective is to establish a seamless and customer-centric environment for the purchase and sale of fragrances, all while ensuring efficient inventory management and smooth business operations.

2.Project Proposal:

Proposes the establishment of a premium fragrance shop in Bangladesh. This project aims to create to individuals who appreciate high-quality, nice fragrances, offering a created selection for men, women, and a unisex market. Our unique selling proposition lies in personalized customer service, helping clients find their perfect scent, and creating a visually appealing store environment. The project encompasses store design, inventory procurement, staff recruitment, and a comprehensive marketing strategy, with a grand opening event planned to generate buzz. We are excited about the opportunity to become the premier fragrance destination in Bangladesh and look forward to discussing this proposal further.

1. Curated Selection: We will offer a carefully curated range of high-quality fragrances for men, women, and the unisex market, focusing on niche and artisanal scents.

2. Personalized Service: Our commitment is to provide personalized customer service, helping individuals discover their perfect scent through knowledgeable staff assistance.

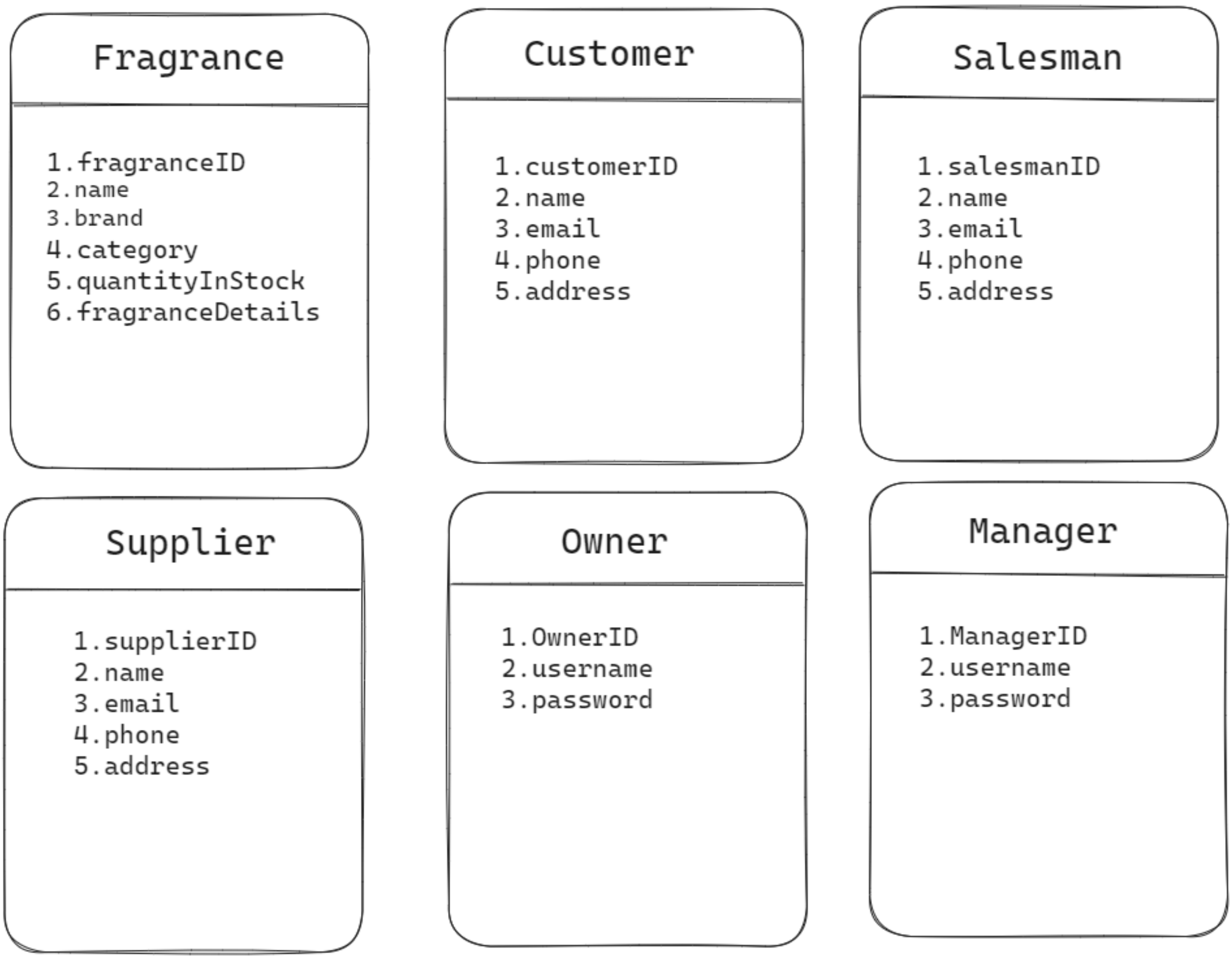
3. Inviting Environment: The store will feature a visually appealing and welcoming environment, enhancing the overall shopping experience for fragrance enthusiasts.

4. Strategic Marketing: A comprehensive marketing strategy, including social media campaigns, influencer collaborations, and grand opening events, will be implemented to generate awareness and excitement.

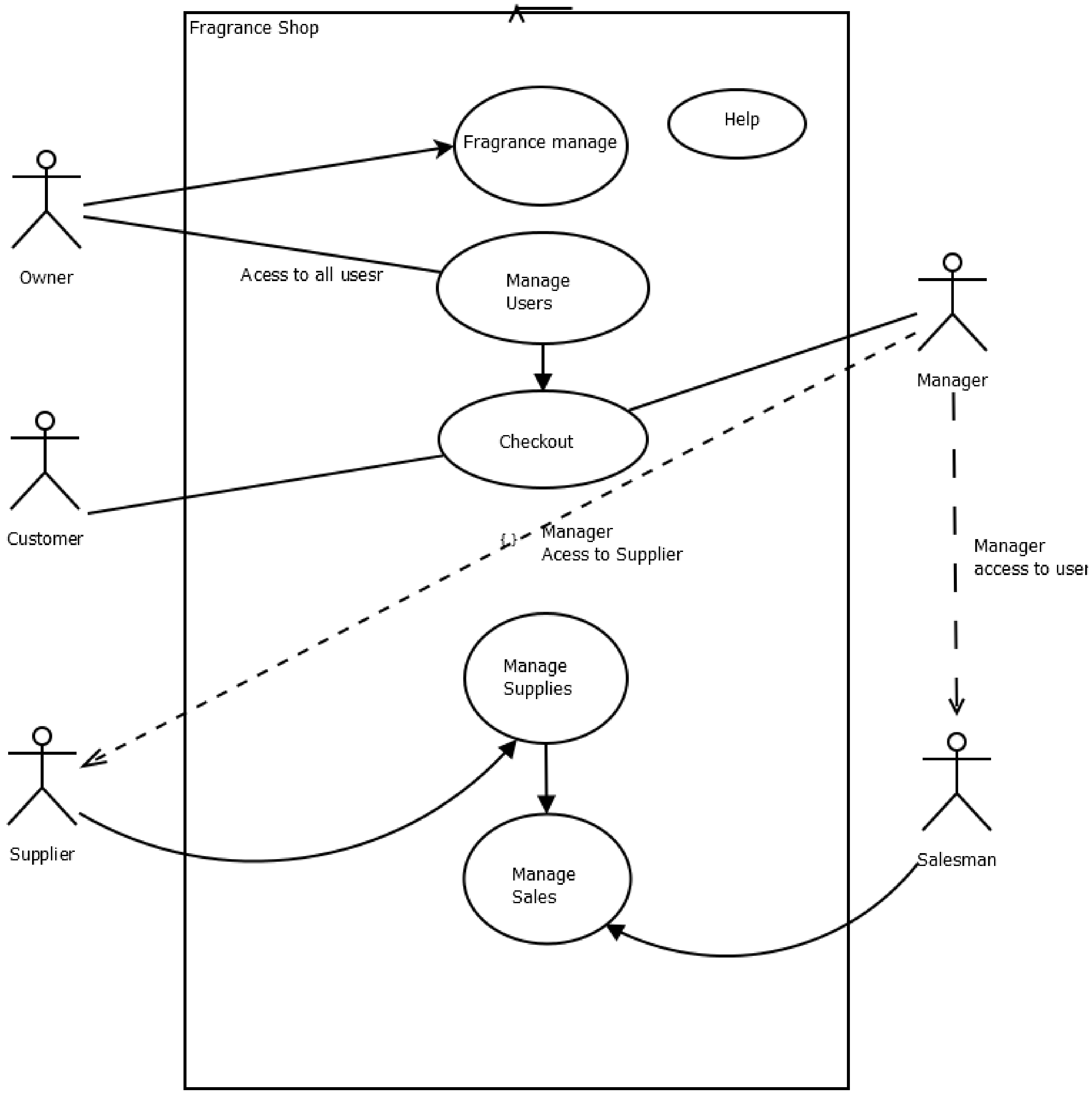
5. Ongoing Improvement: Beyond the initial setup, we will focus on continuous improvement, staying attuned to industry trends and customer feedback to ensure a thriving and dynamic fragrance destination

3.Class Diagram, Use Case Diagram, Activity Diagram:

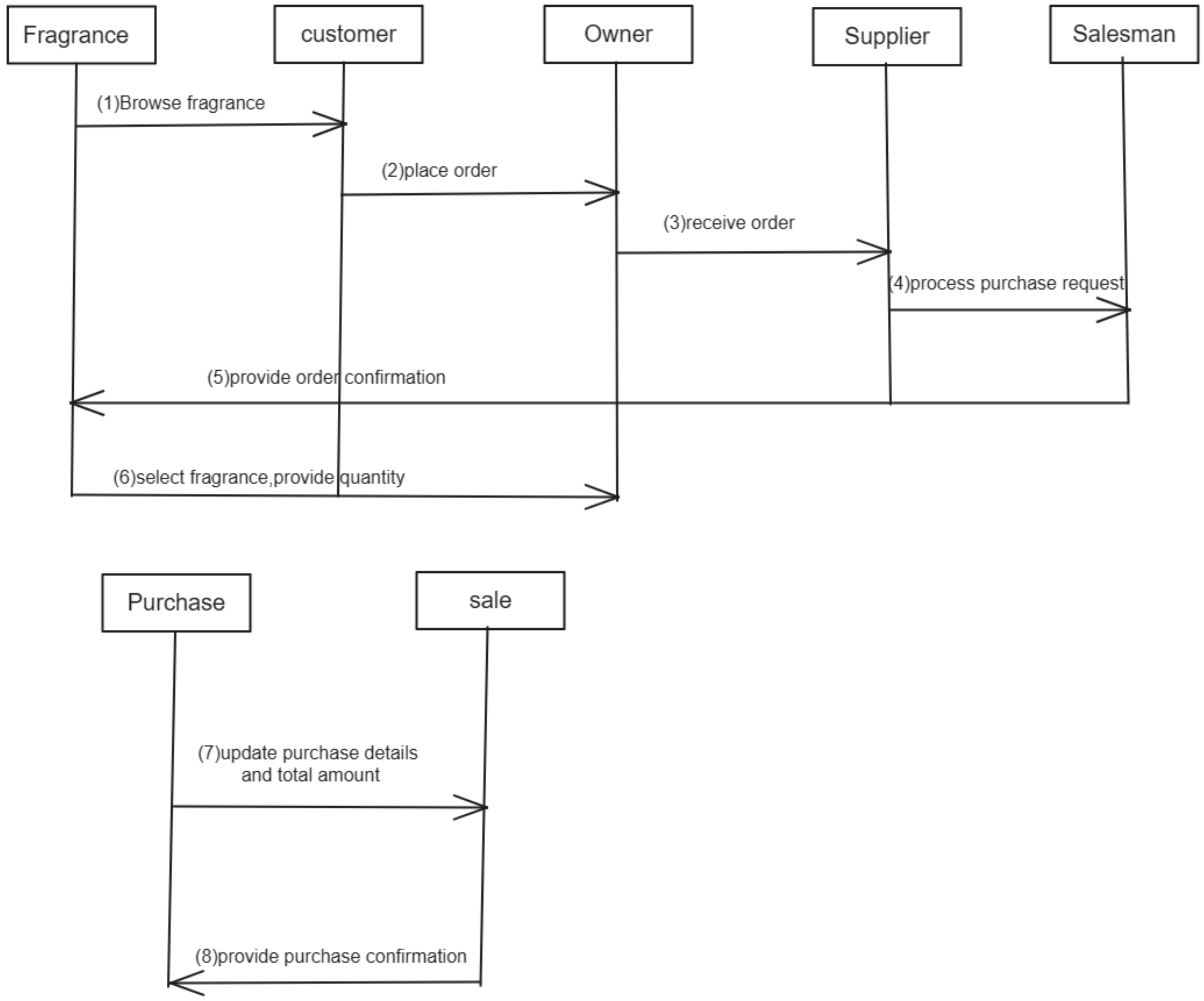
Class Diagram



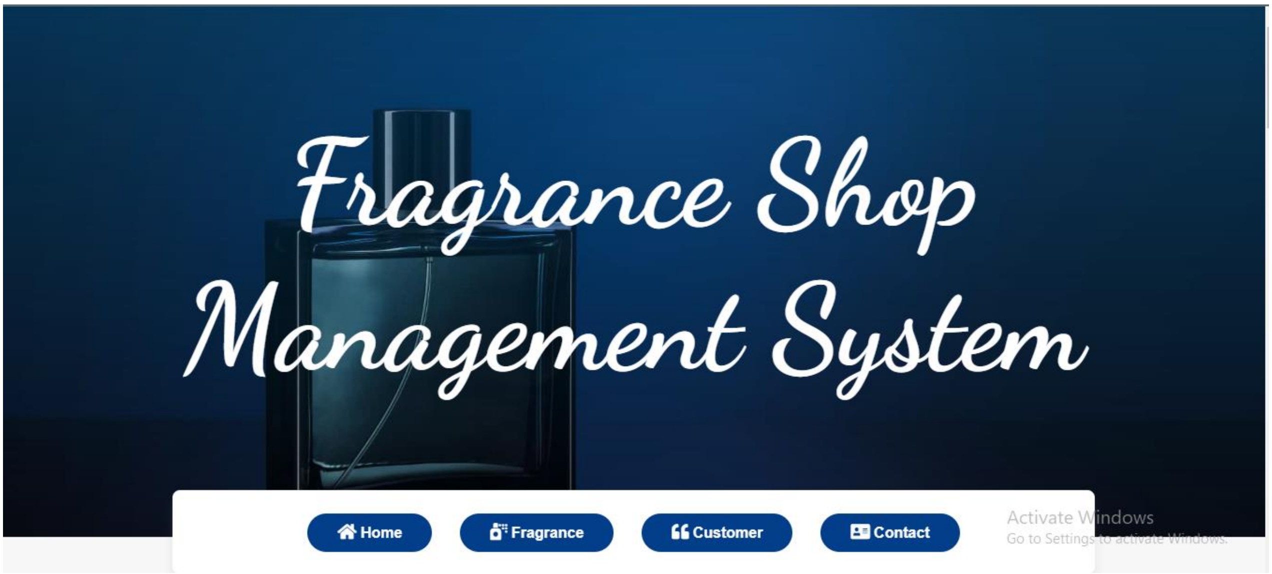
Use Case Diagram

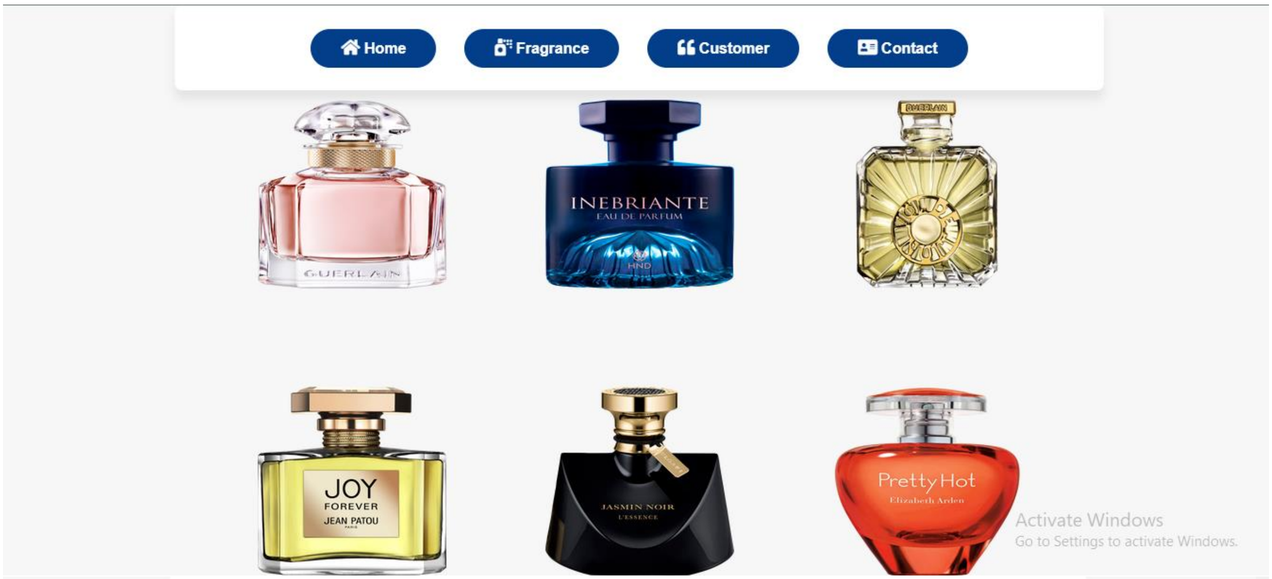


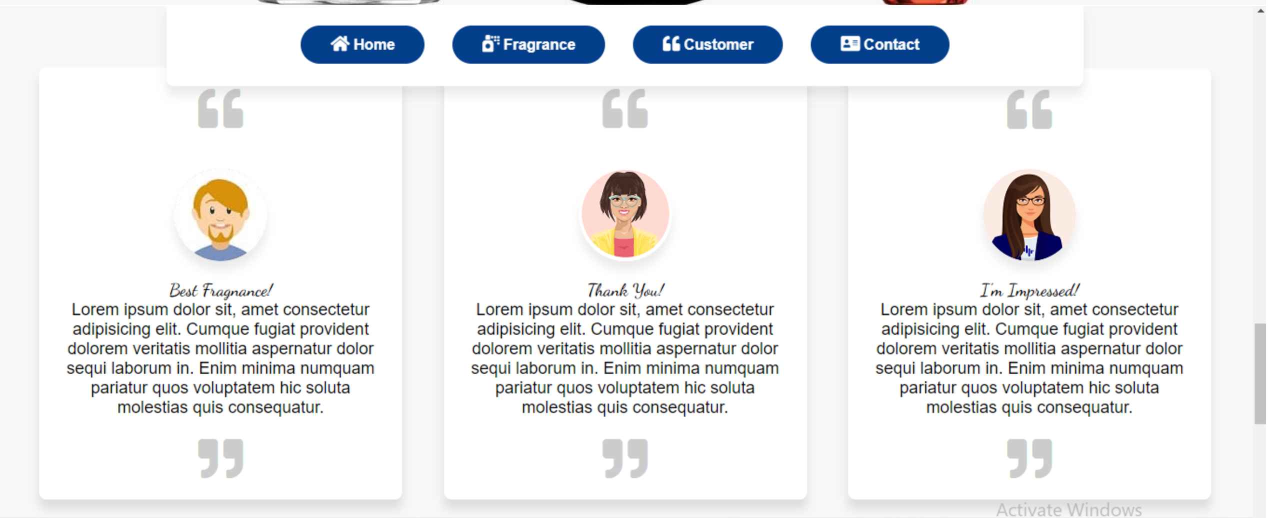
Activity Diagram


Fragrance
customer
Owner
Supplier
Salesman
(1)Browse fragrance
(2)place order
(3)receive order
(4)process purchase request
(5)provide order confirmation
(6)select fragrance,provide quantity
Purchase
sale
(7)update purchase details and total amount
(8)provide purchase confirmation

4.User Interface:


Fragrance Shop Management System
Home
Fragrance
Customer
Contact
Activate Windows
Go to Settings to activate Windows.

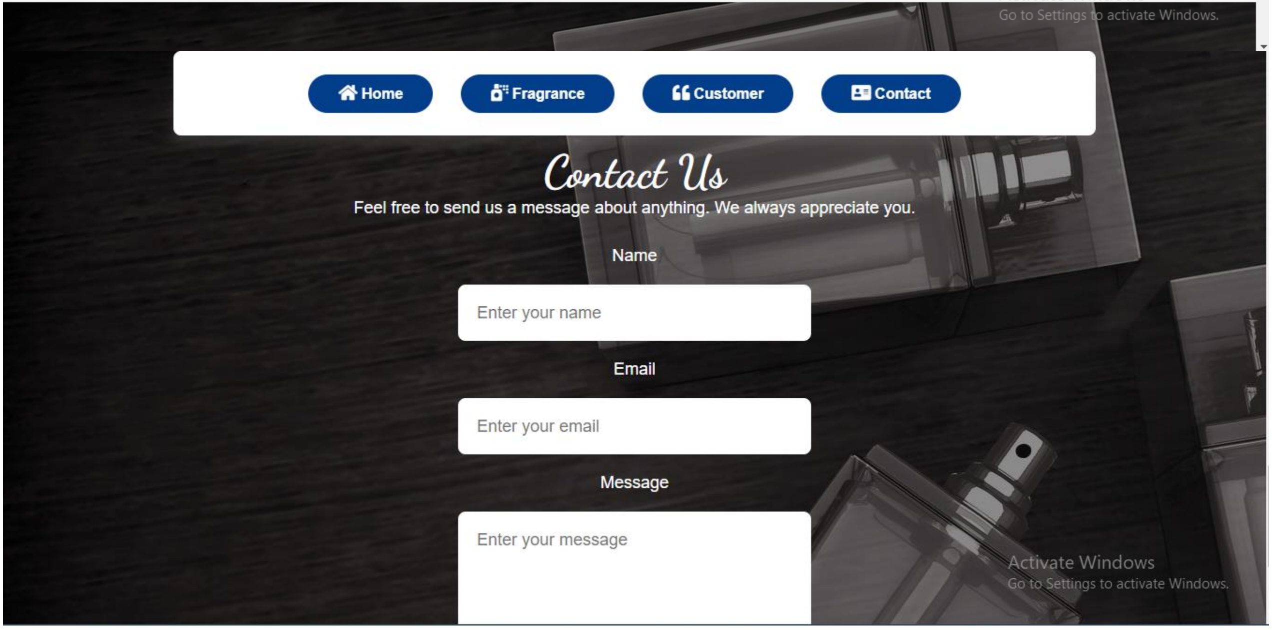




Best Fragrance!
Lorem ipsum dolor sit, amet consectetur adipisicing elit. Cumque fugiat provident dolorem veritatis mollitia aspernatur dolor sequi laborum in. Enim minima numquam pariatur quos voluptatem hic soluta molestias quis consequatur.

Thank You!
Lorem ipsum dolor sit, amet consectetur adipisicing elit. Cumque fugiat provident dolorem veritatis mollitia aspernatur dolor sequi laborum in. Enim minima numquam pariatur quos voluptatem hic soluta molestias quis consequatur.

I'm Impressed!
Lorem ipsum dolor sit, amet consectetur adipisicing elit. Cumque fugiat provident dolorem veritatis mollitia aspernatur dolor sequi laborum in. Enim minima numquam pariatur quos voluptatem hic soluta molestias quis consequatur.



Contact Us

Feel free to send us a message about anything. We always appreciate you.

Name

Enter your name

Email

Enter your email

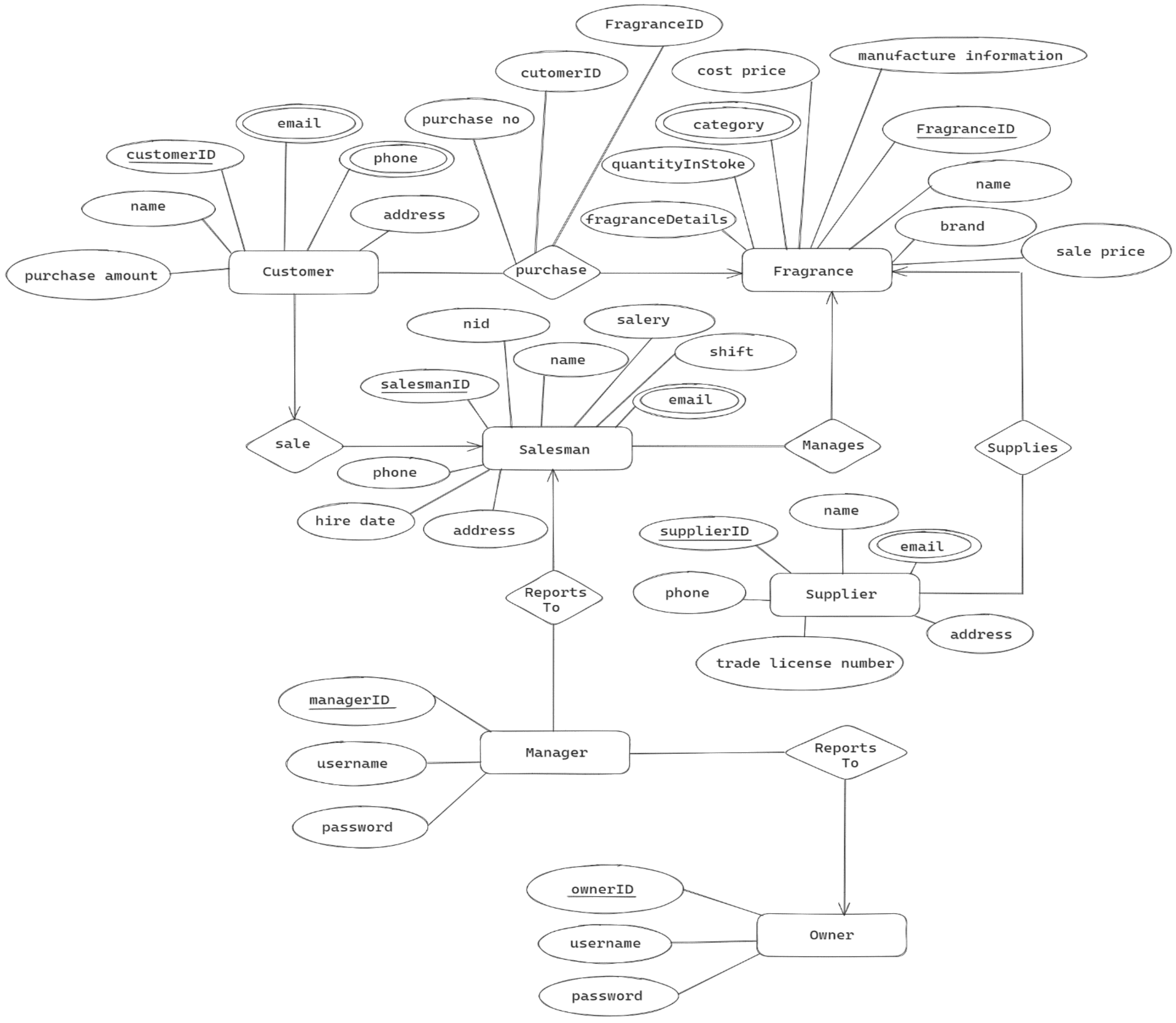
Message

Enter your message

5.Scenario Description:

In a Fragrance shop, a customer may purchase many Fragrance. Each customer has a unique customer id. Customer data such as customer name, phone number, address, email, purchase amount is also stored in the system. A customer can have multiple phone Number. When purchasing a unique purchaseNo is stored. The Fragrance are identified by their FragranceID. The name, cost price, sell price, brand, quantity stock, category, fragrance details, manufacturer information is available in the system. Supplier supplies fragrance to the shop, this shop have multiple suppliers. Each supplier has their own unique supplierID, name, email, address, phone Number, trade license Number. Fragrance is sold by salesman, where each Fragrance can be sold by one salesman but one salesman can sell many Fragrances. Each salesman is identified by their own unique salesmanID. The system also has salesman name, shift, salary, hire date, phone no, address, NID stored. Each salesman reports one manager, and one manager oversees all salesman. A manager reports the owner. managers have their own unique manager ID and their username, password are stored in the database. Managers, salesman and supplier can have multiple phone numbers. Fragrance shop owned by multiple owners. Each of the owners are identified by their ownerID. Other data such as username and password are also stored in the database.

6.ER Diagram:



7.Normalization

1NF:

- **Customer** (customerID [PK], email, name, purchaseAmount, phone, address)
- **Fragrance** (FragranceID [PK], name, brand, salePrice, quantityInStock, costPrice, category, manufactureInformation)
- **Purchase** (purchaseNo [PK], customerID [FK], FragranceID [FK])
- **Salesman** (salesmanID [PK], nid, name, salary, shift, email, phone, hireDate, address)
- **Supplier** (supplierID [PK], phone, tradeLicenseNumber, address, email, name)
- **Manager** (managerID [PK], username, password)
- **Owner** (ownerID [PK], username, password)

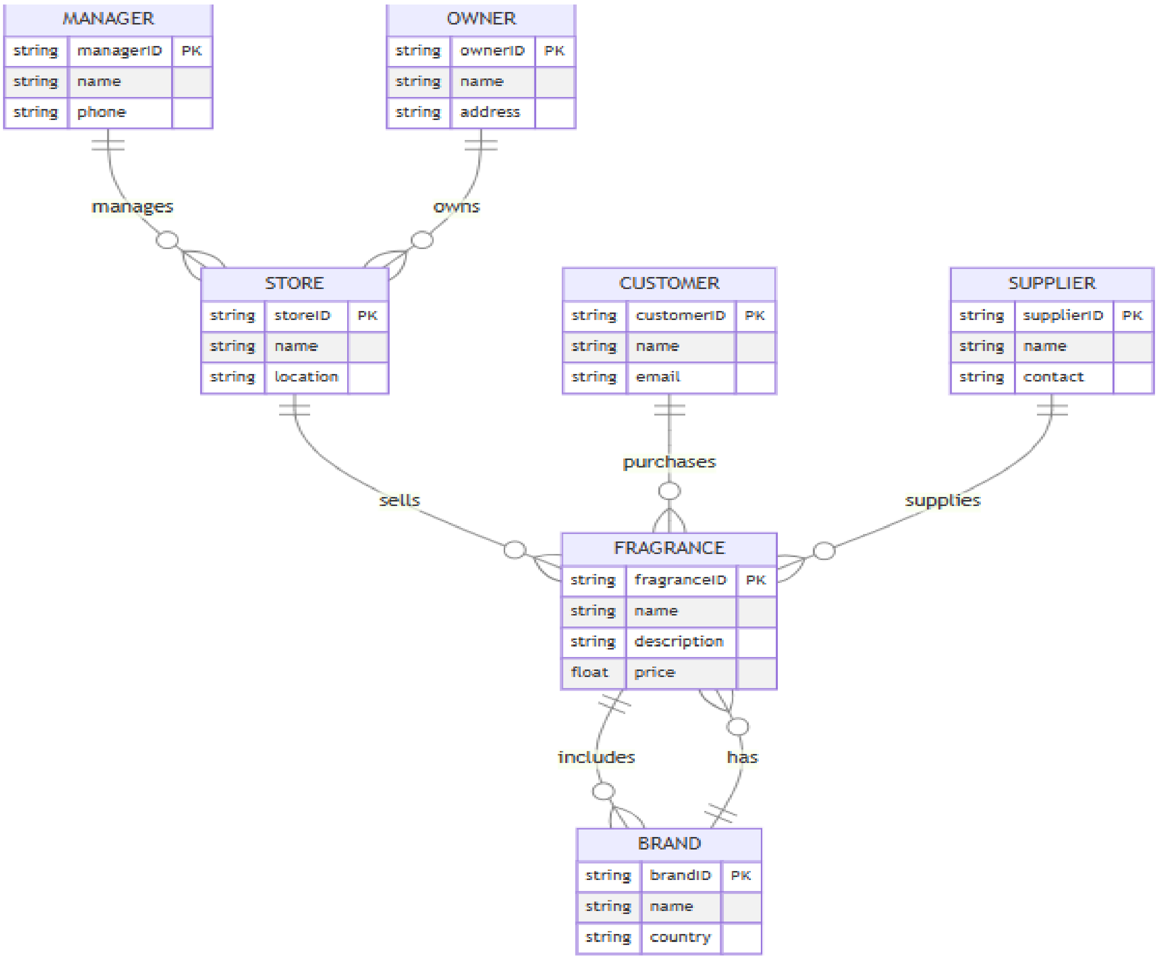
2NF:

- All entities are already in 2NF, as there are no partial dependencies. Each attribute is fully functionally dependent on the primary key.

3NF:

- All entities are already in 3NF, as there are no transitive dependencies. Each non-prime attribute is non-transitively dependent on every super key.

8.Schema Diagram:



MANAGER		
string	managerID	PK
string	name	
string	phone	

OWNER		
string	ownerID	PK
string	name	
string	address	

STORE		
string	storeID	PK
string	name	
string	location	

CUSTOMER		
string	customerID	PK
string	name	
string	email	

SUPPLIER		
string	supplierID	PK
string	name	
string	contact	

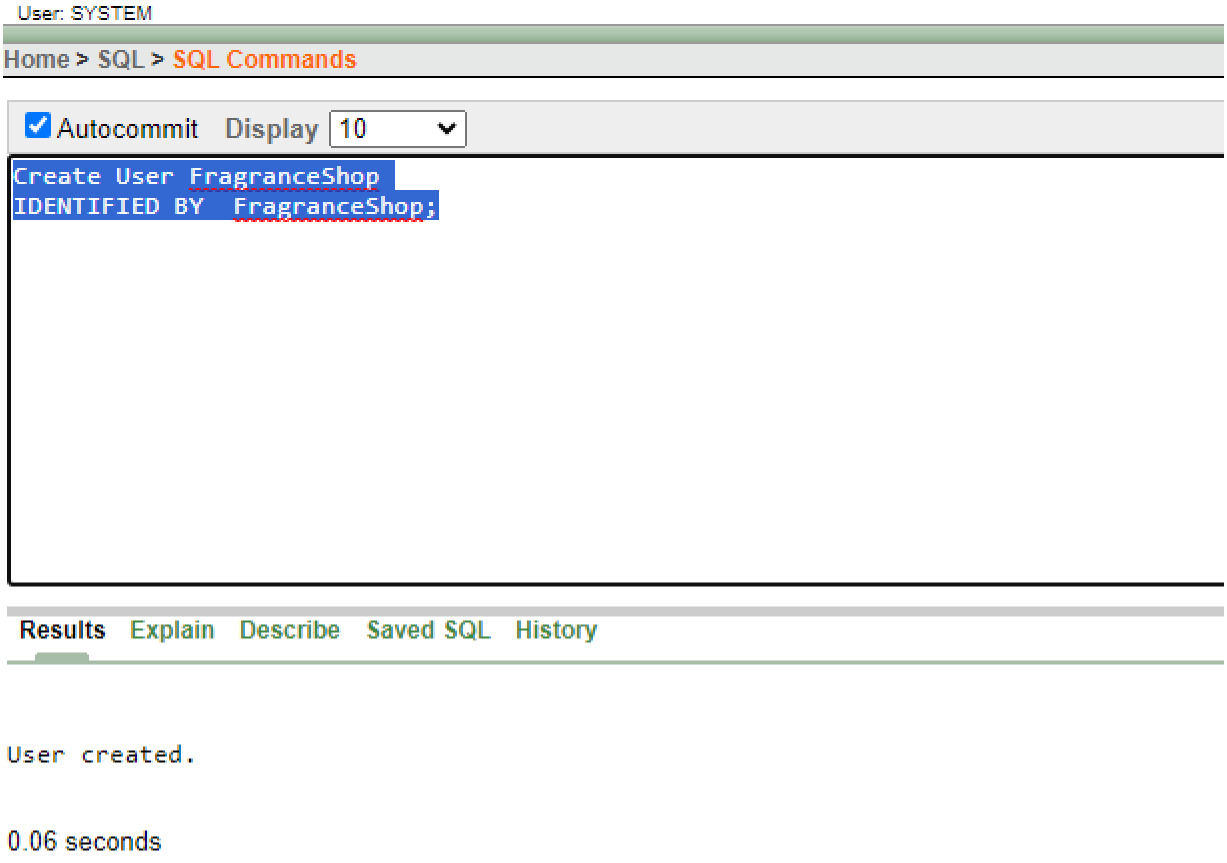
FRAGRANCE		
string	fragranceID	PK
string	name	
string	description	
float	price	

BRAND		
string	brandID	PK
string	name	
string	country	

9.Table Creation:

- **FragranceShop User Create:**

Create User FragranceShop
IDENTIFIED BY FragranceShop;



User: SYSTEM
Home > SQL > SQL Commands
☑ Autocommit Display 10
Results Explain Describe Saved SQL History

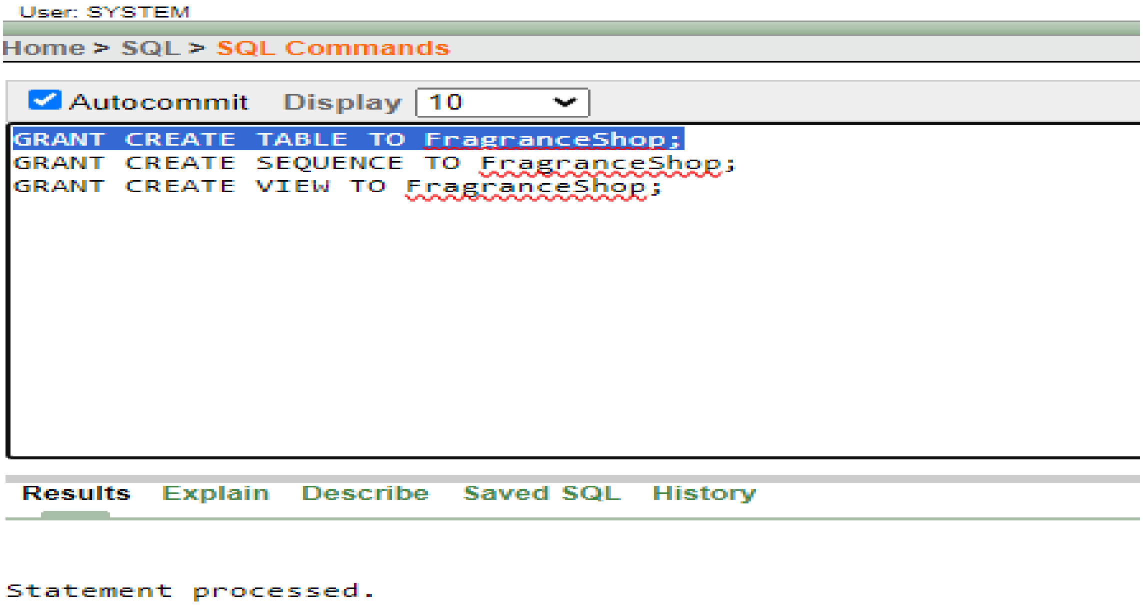
```
Create User FragranceShop
IDENTIFIED BY  FragranceShop;
```

```
User created.
```

0.06 seconds

- **Grant Privileges:**

GRANT CREATE TABLE TO FragranceShop;

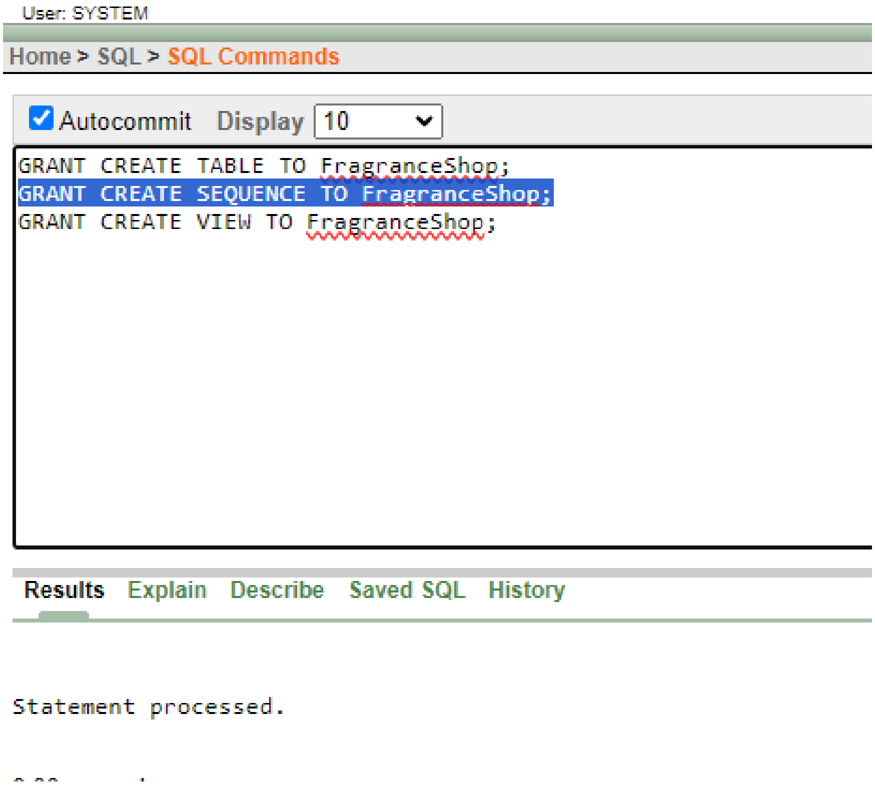


User: SYSTEM
Home > SQL > SQL Commands
☑ Autocommit Display 10
Results Explain Describe Saved SQL History

```
GRANT CREATE TABLE TO FragranceShop;
GRANT CREATE SEQUENCE TO FragranceShop;
GRANT CREATE VIEW TO FragranceShop;
```

```
Statement processed.
```

GRANT CREATE SEQUENCE TO FragranceShop;

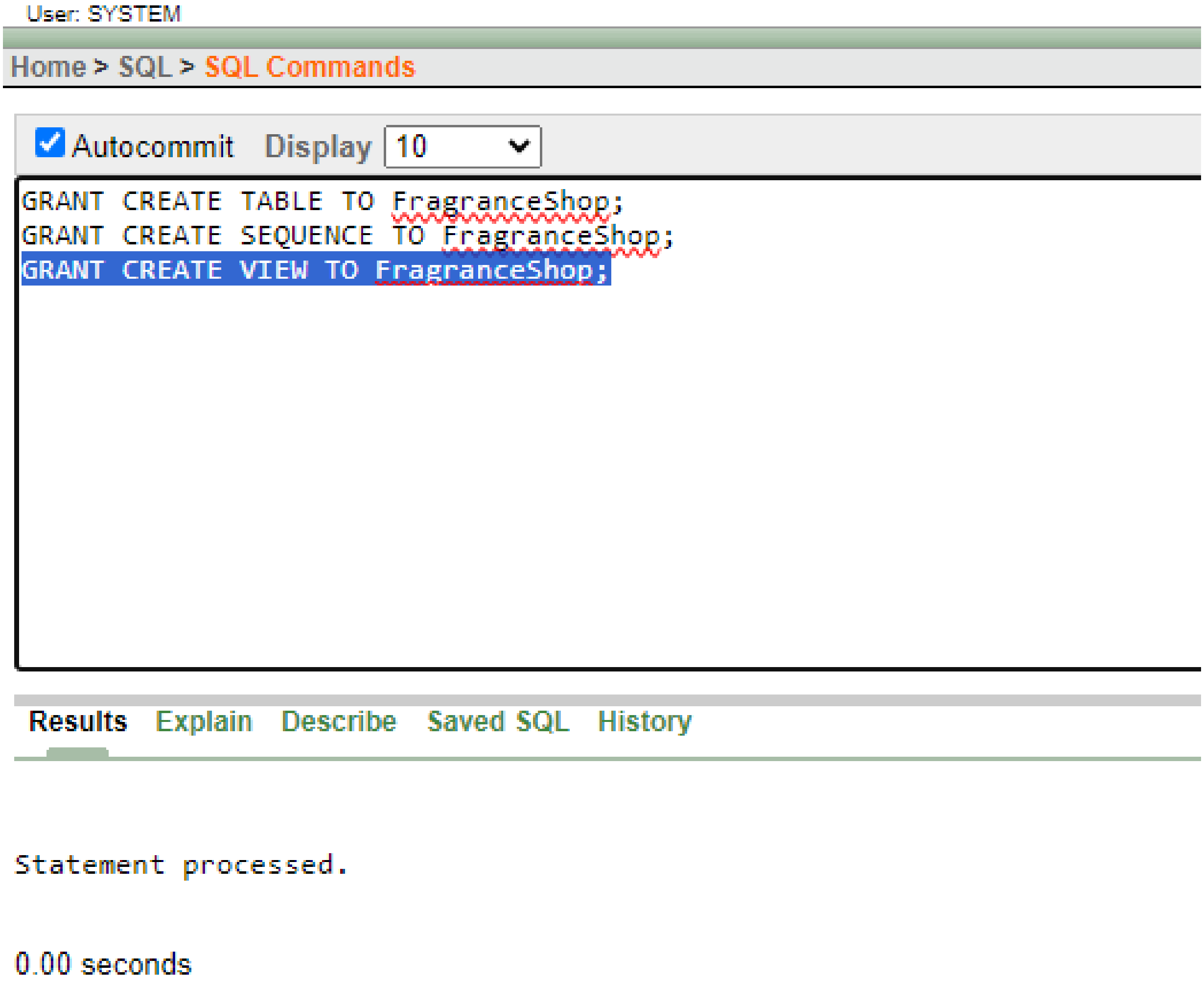


☑ Autocommit Display 10

```
GRANT CREATE TABLE TO FragranceShop;
GRANT CREATE SEQUENCE TO FragranceShop;
GRANT CREATE VIEW TO FragranceShop;
```

```
Statement processed.
```

GRANT CREATE VIEW TO FragranceShop;



☑ Autocommit Display 10

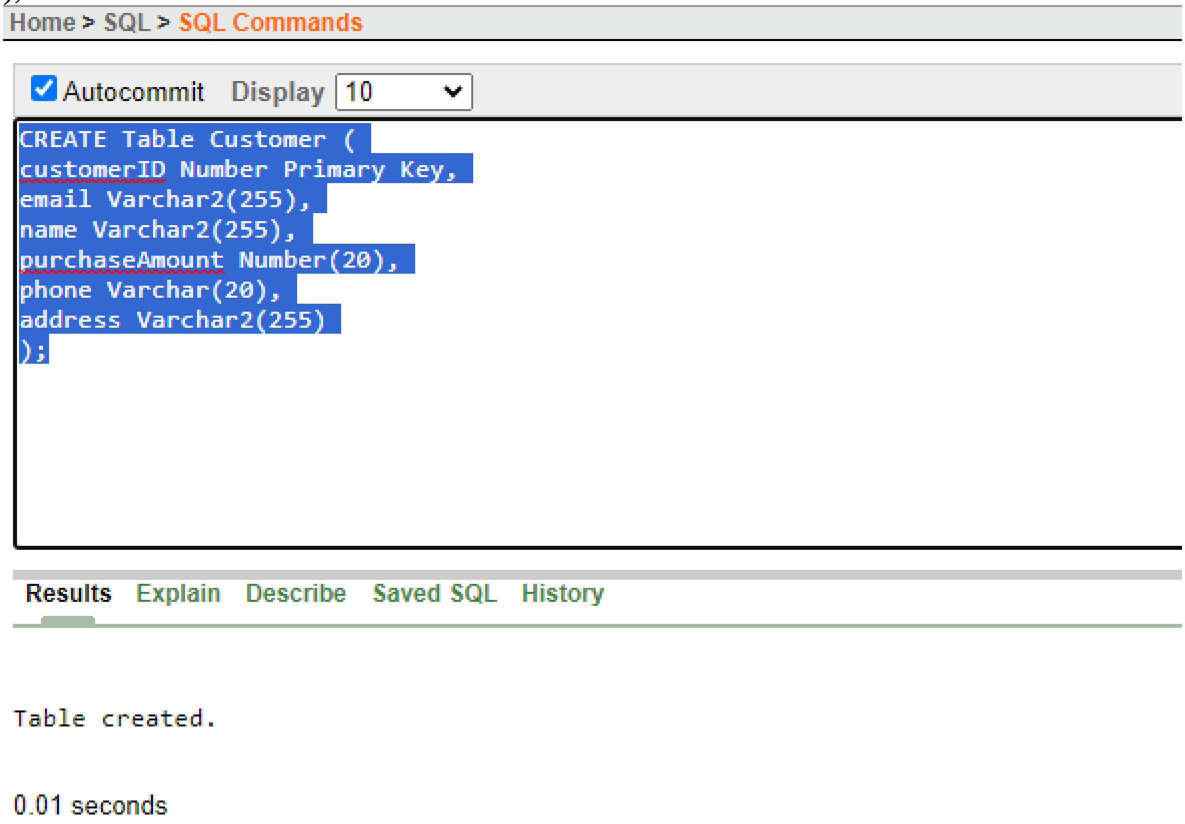
```
GRANT CREATE TABLE TO FragranceShop;
GRANT CREATE SEQUENCE TO FragranceShop;
GRANT CREATE VIEW TO FragranceShop;
```

```
Statement processed.
```

0.00 seconds

- **Customer Entity:**

```
CREATE Table Customer (
customerID Number Primary Key,
email Varchar2(255),
name Varchar2(255),
purchaseAmount Number(20),
phone Varchar(20),
address Varchar2(255)
);
```


Home > SQL > SQL Commands
☑ Autocommit Display 10
Results Explain Describe Saved SQL History

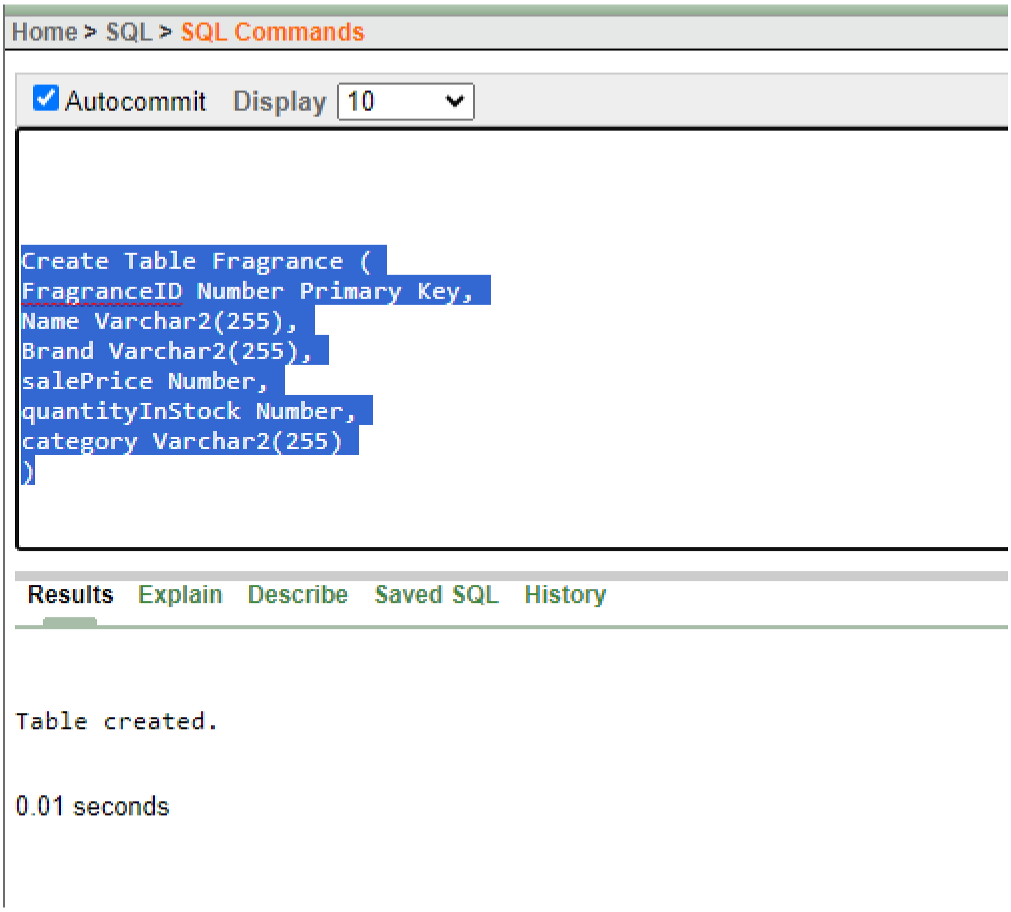
```
CREATE Table Customer (
customerID Number Primary Key,
email Varchar2(255),
name Varchar2(255),
purchaseAmount Number(20),
phone Varchar(20),
address Varchar2(255)
);
```

```
Table created.

0.01 seconds
```

- **Fragrance Entity:**

```
Create Table Fragrance (
FragranceID Number Primary Key,
Name Varchar2(255),
Brand Varchar2(255),
salePrice Number,
quantityInStock Number,
category Varchar2(255)
);
```


Home > SQL > SQL Commands
☑ Autocommit Display 10
Results Explain Describe Saved SQL History

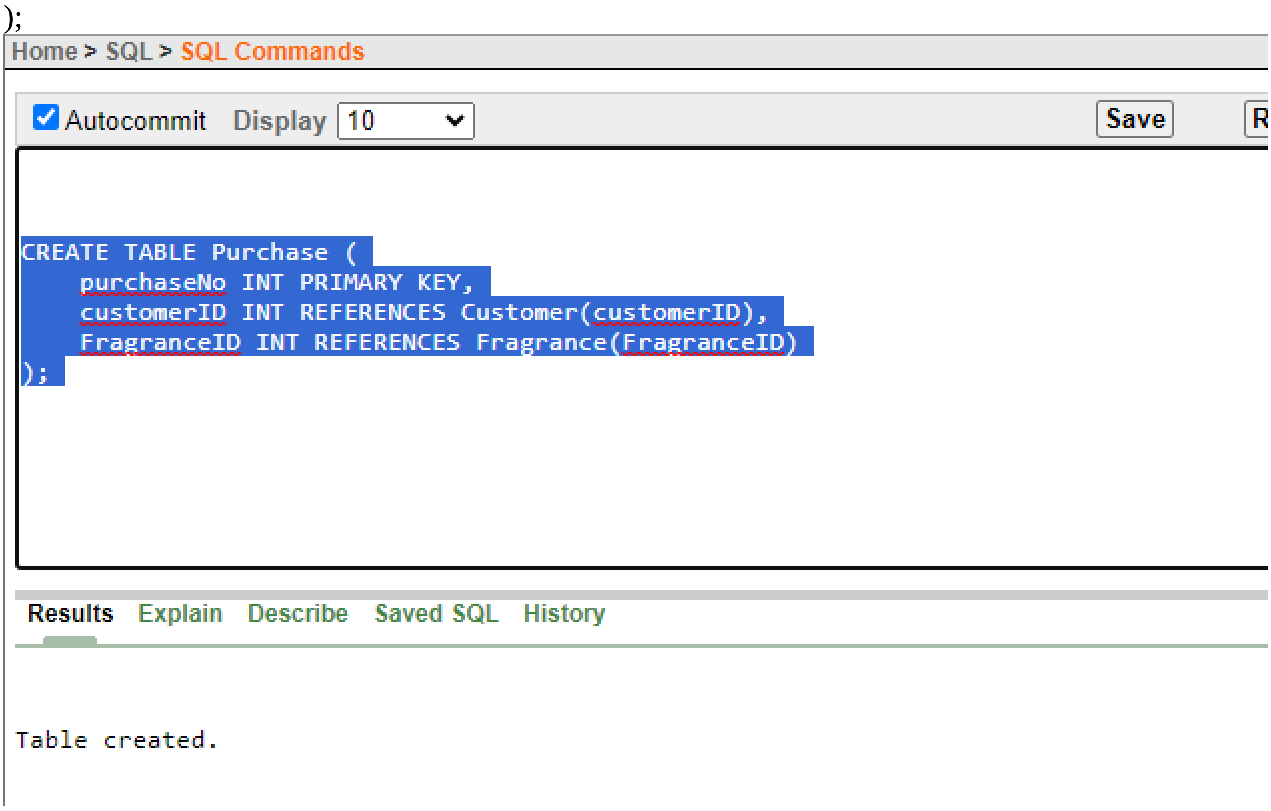
```
Create Table Fragrance (
FragranceID Number Primary Key,
Name Varchar2(255),
Brand Varchar2(255),
salePrice Number,
quantityInStock Number,
category Varchar2(255)
)
```

```
Table created.

0.01 seconds
```

- **Purchase Entity**

Create Table Purchase (
purchaseNo Number Primary Key,
customerID Number References Customer(customerID),
FragranceID Number References Fragrance(FragranceID)
);

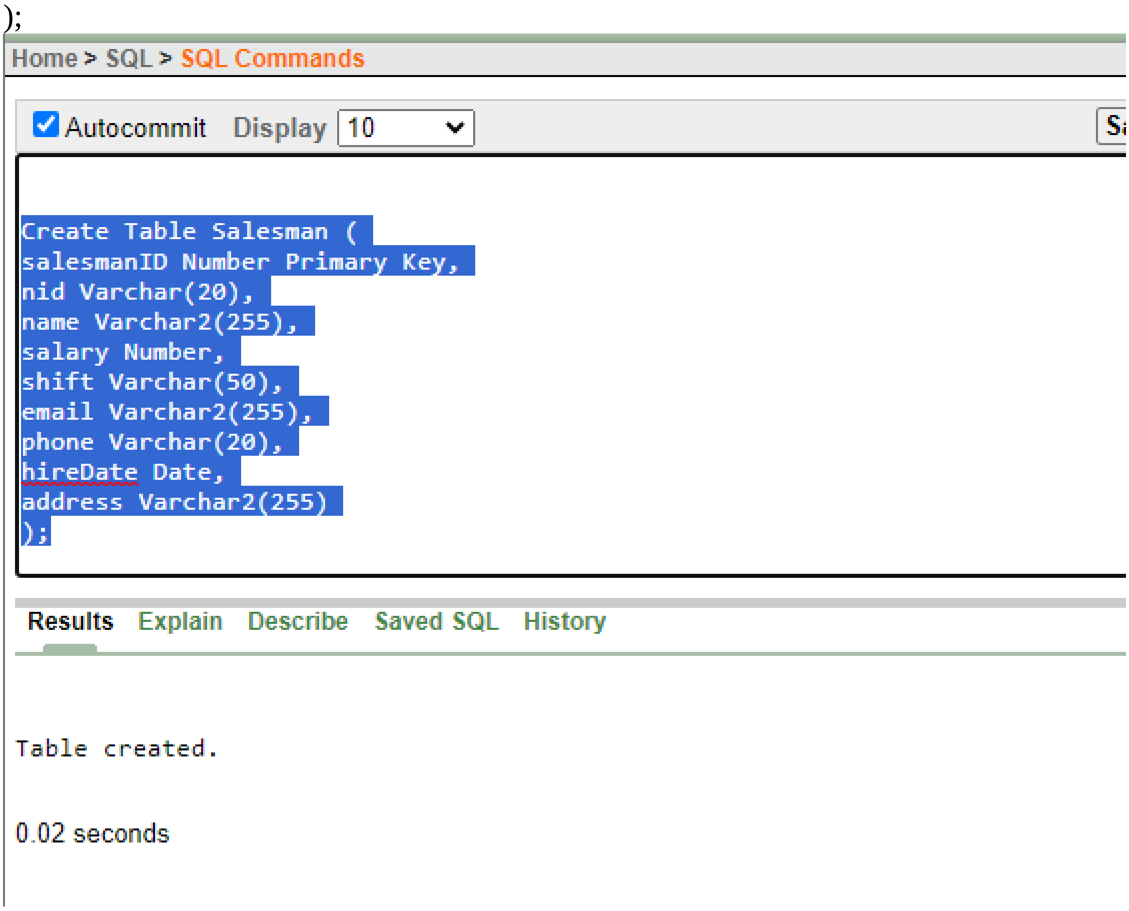

Home > SQL > SQL Commands
☑ Autocommit Display 10
Save
R
Results Explain Describe Saved SQL History

```
CREATE TABLE Purchase (
    purchaseNo INT PRIMARY KEY,
    customerID INT REFERENCES Customer(customerID),
    FragranceID INT REFERENCES Fragrance(FragranceID)
);
```

```
Table created.
```

- **Salesman Entity**

```
Create Table Salesman (
salesmanID Number Primary Key,
nid Varchar(20),
name Varchar2(255),
salary Number,
shift Varchar(50),
email Varchar2(255),
phone Varchar(20),
hireDate Date,
address Varchar2(255)
);
```


Home > SQL > SQL Commands
☑ Autocommit Display 10
Sa
Results Explain Describe Saved SQL History

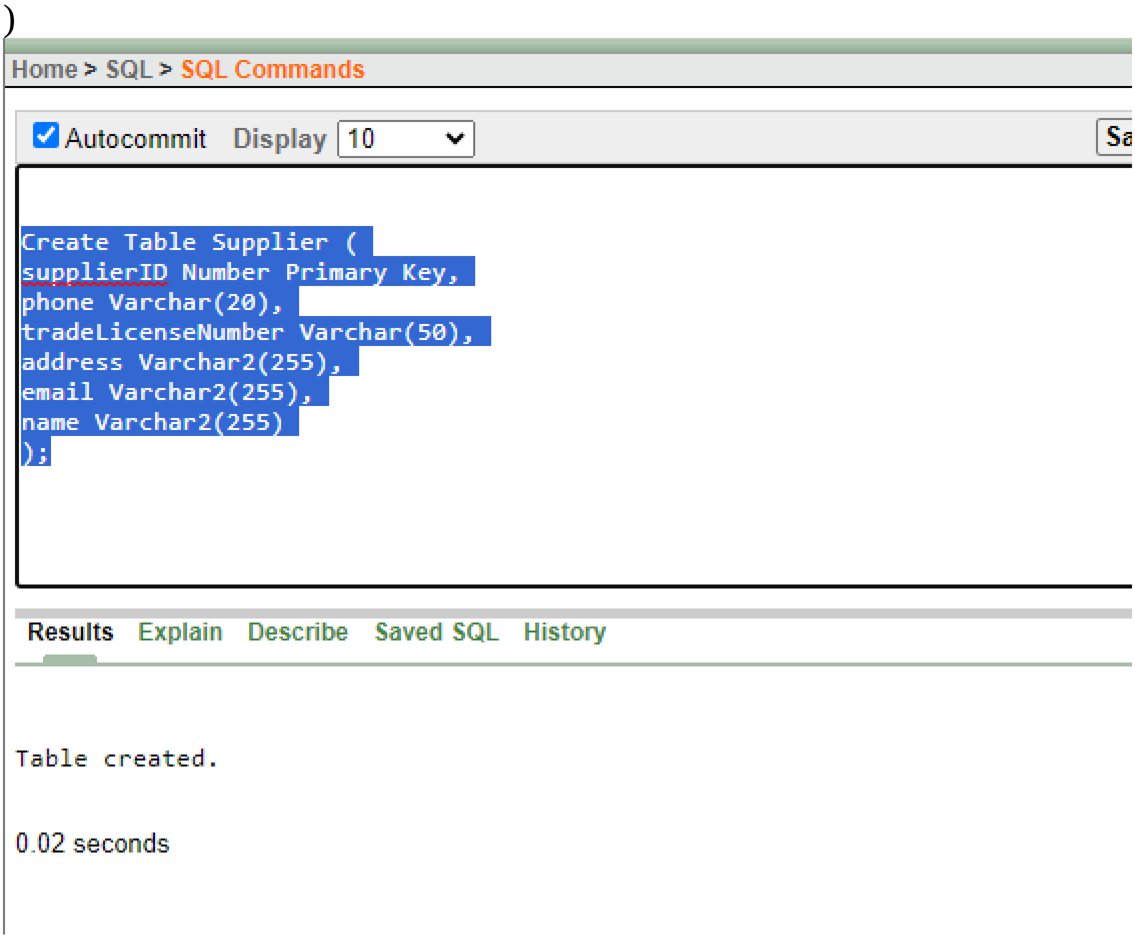
```
Create Table Salesman (
salesmanID Number Primary Key,
nid Varchar(20),
name Varchar2(255),
salary Number,
shift Varchar(50),
email Varchar2(255),
phone Varchar(20),
hireDate Date,
address Varchar2(255)
);
```

```
Table created.

0.02 seconds
```

- **Supplier Entity**

Create Table Supplier (
supplierID Number Primary Key,
phone Varchar(20),
tradeLicenseNumber Varchar(50),
address Varchar2(255),
email Varchar2(255),
name Varchar2(255);
)



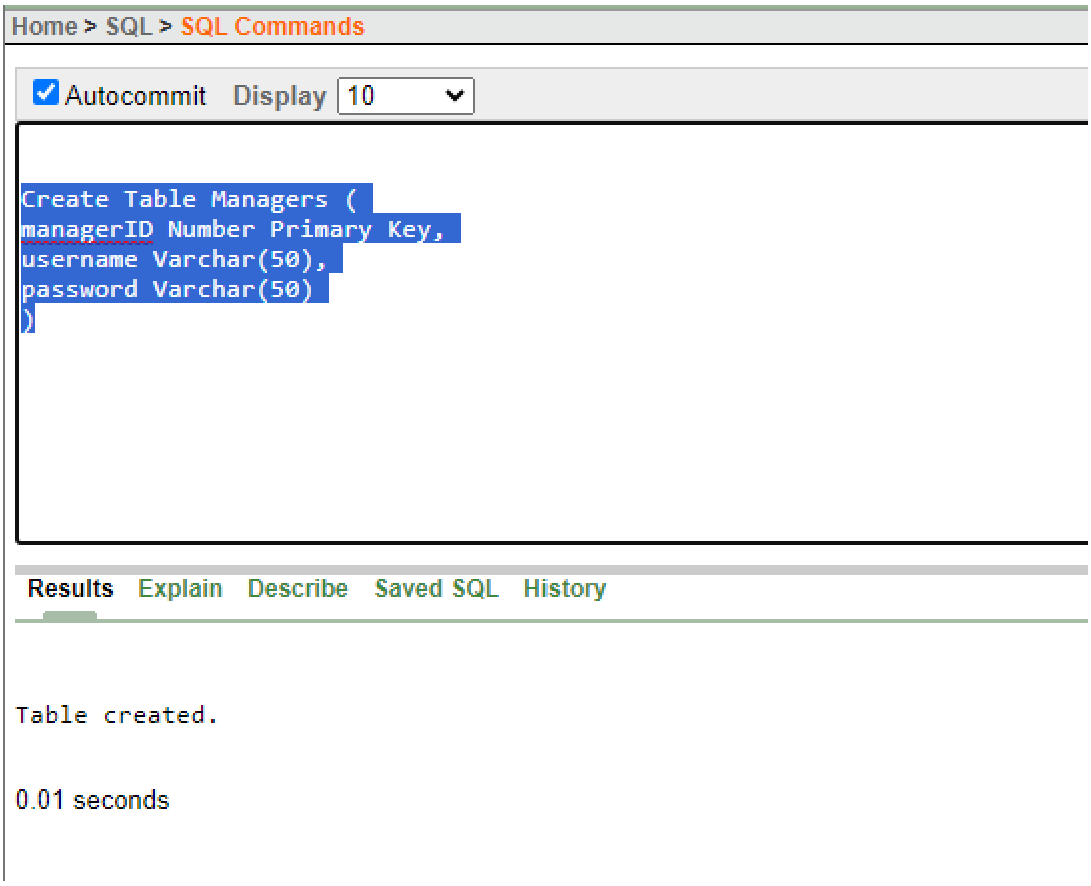
```
Create Table Supplier (
supplierID Number Primary Key,
phone Varchar(20),
tradeLicenseNumber Varchar(50),
address Varchar2(255),
email Varchar2(255),
name Varchar2(255)
);
```

```
Table created.

0.02 seconds
```

- **Managers Entity**

Create Table Managers (
managerID Number Primary Key,
username Varchar(50),
password Varchar(50)
);


Home > SQL > SQL Commands
☑ Autocommit Display 10
Results Explain Describe Saved SQL History

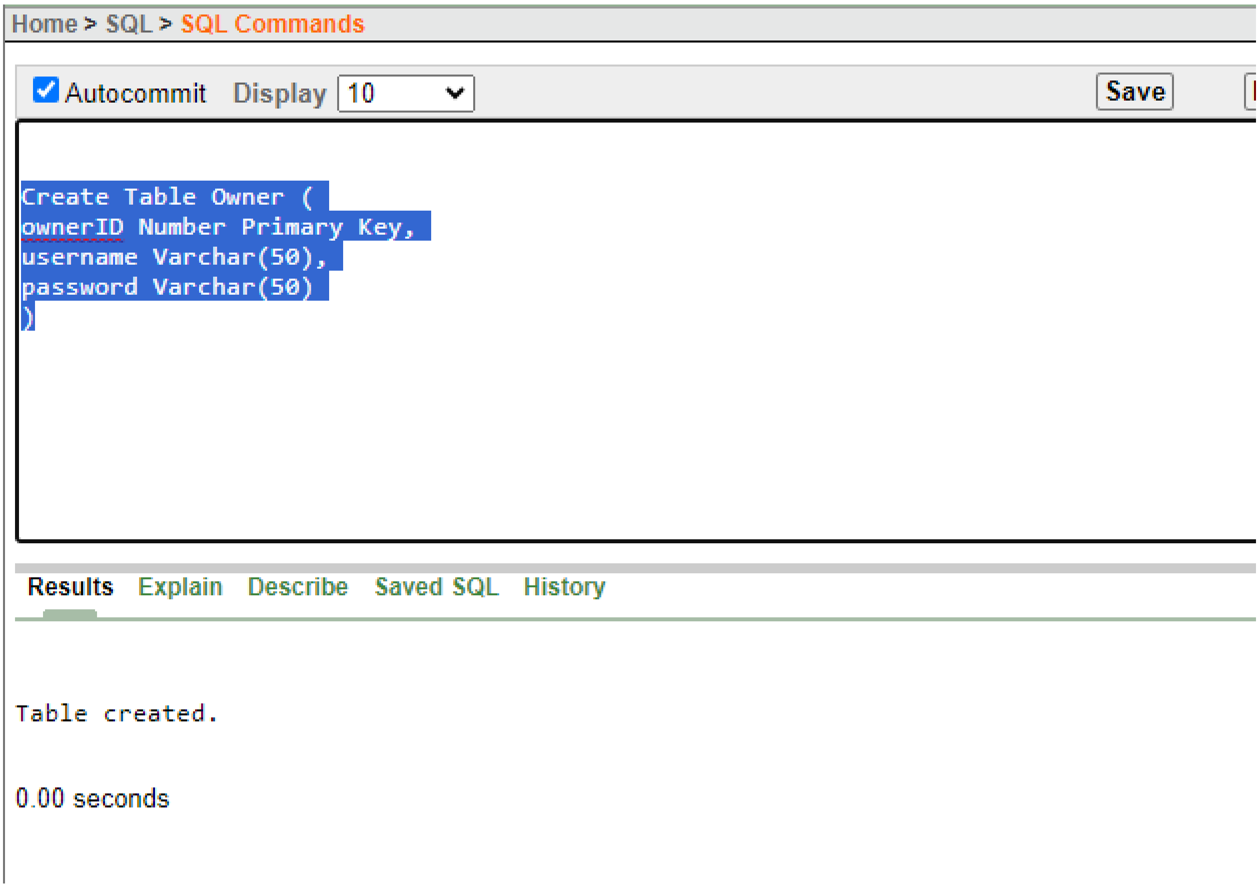
```
Create Table Managers (
managerID Number Primary Key,
username Varchar(50),
password Varchar(50)
)
```

```
Table created.

0.01 seconds
```

- **Owner Entity**

Create Table Owner (
ownerID Number Primary Key,
username Varchar(50) Unique,
password Varchar(50)
);


Home > SQL > SQL Commands
☑ Autocommit Display 10
Save
Results Explain Describe Saved SQL History

```
Create Table Owner (
ownerID Number Primary Key,
username Varchar(50),
password Varchar(50)
)
```

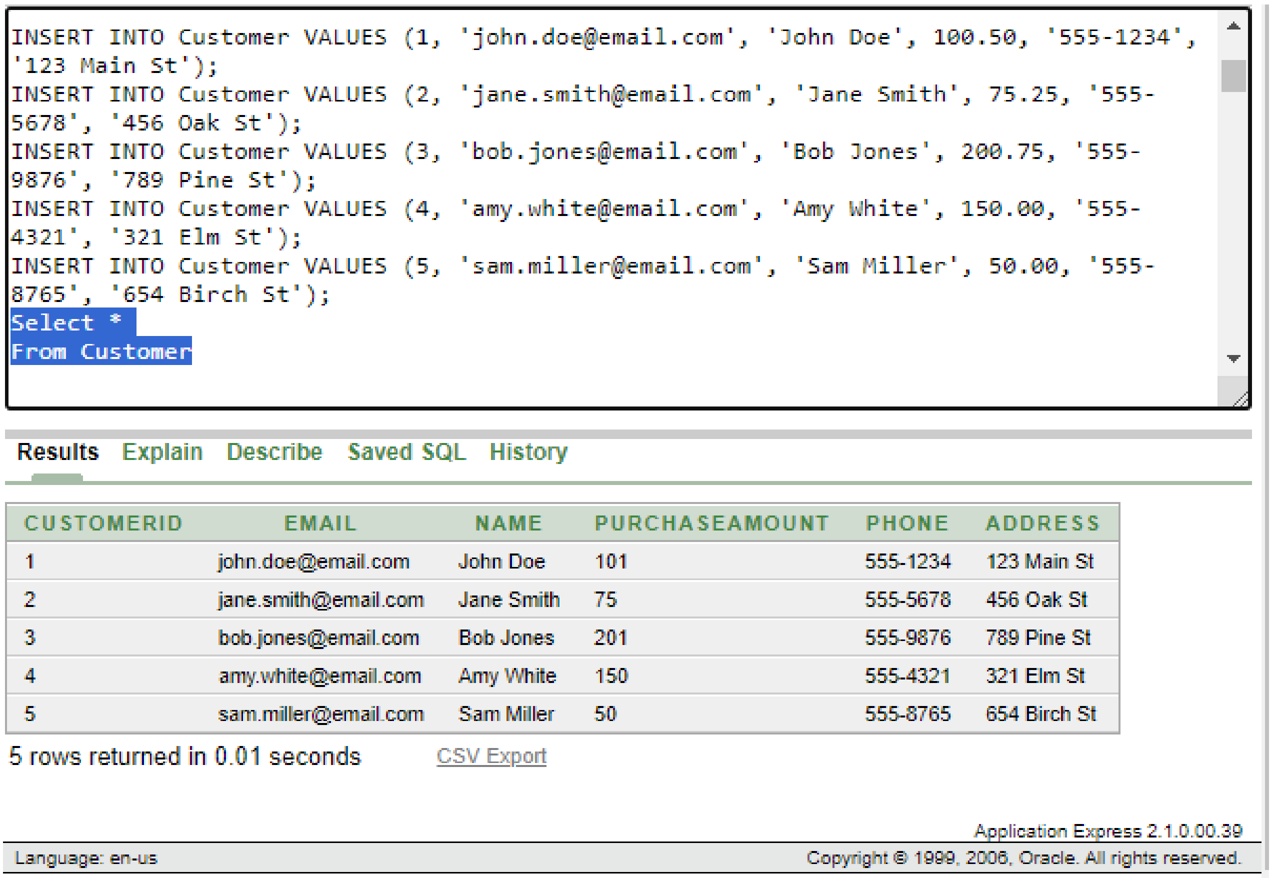
```
Table created.
```

0.00 seconds

10.Data Insertion:

Customer Entity:

INSERT INTO Customer VALUES (1, 'john.doe@email.com', 'John Doe', 100.50, '555-1234', '123 Main St');
INSERT INTO Customer VALUES (2, 'jane.smith@email.com', 'Jane Smith', 75.25, '555-5678', '456 Oak St');
INSERT INTO Customer VALUES (3, 'bob.jones@email.com', 'Bob Jones', 200.75, '555-9876', '789 Pine St');
INSERT INTO Customer VALUES (4, 'amy.white@email.com', 'Amy White', 150.00, '555-4321', '321 Elm St');
INSERT INTO Customer VALUES (5, 'sam.miller@email.com', 'Sam Miller', 50.00, '555-8765', '654 Birch St');
Select *
From Customer



```
INSERT INTO Customer VALUES (1, 'john.doe@email.com', 'John Doe', 100.50, '555-1234',
'123 Main St');
INSERT INTO Customer VALUES (2, 'jane.smith@email.com', 'Jane Smith', 75.25, '555-
5678', '456 Oak St');
INSERT INTO Customer VALUES (3, 'bob.jones@email.com', 'Bob Jones', 200.75, '555-
9876', '789 Pine St');
INSERT INTO Customer VALUES (4, 'amy.white@email.com', 'Amy White', 150.00, '555-
4321', '321 Elm St');
INSERT INTO Customer VALUES (5, 'sam.miller@email.com', 'Sam Miller', 50.00, '555-
8765', '654 Birch St');
Select *
From Customer
```

CUSTOMERID	EMAIL	NAME	PURCHASEAMOUNT	PHONE	ADDRESS
1	john.doe@email.com	John Doe	101	555-1234	123 Main St
2	jane.smith@email.com	Jane Smith	75	555-5678	456 Oak St
3	bob.jones@email.com	Bob Jones	201	555-9876	789 Pine St
4	amy.white@email.com	Amy White	150	555-4321	321 Elm St
5	sam.miller@email.com	Sam Miller	50	555-8765	654 Birch St

5 rows returned in 0.01 seconds

CSV Export
Application Express 2.1.0.00.39
Language: en-us
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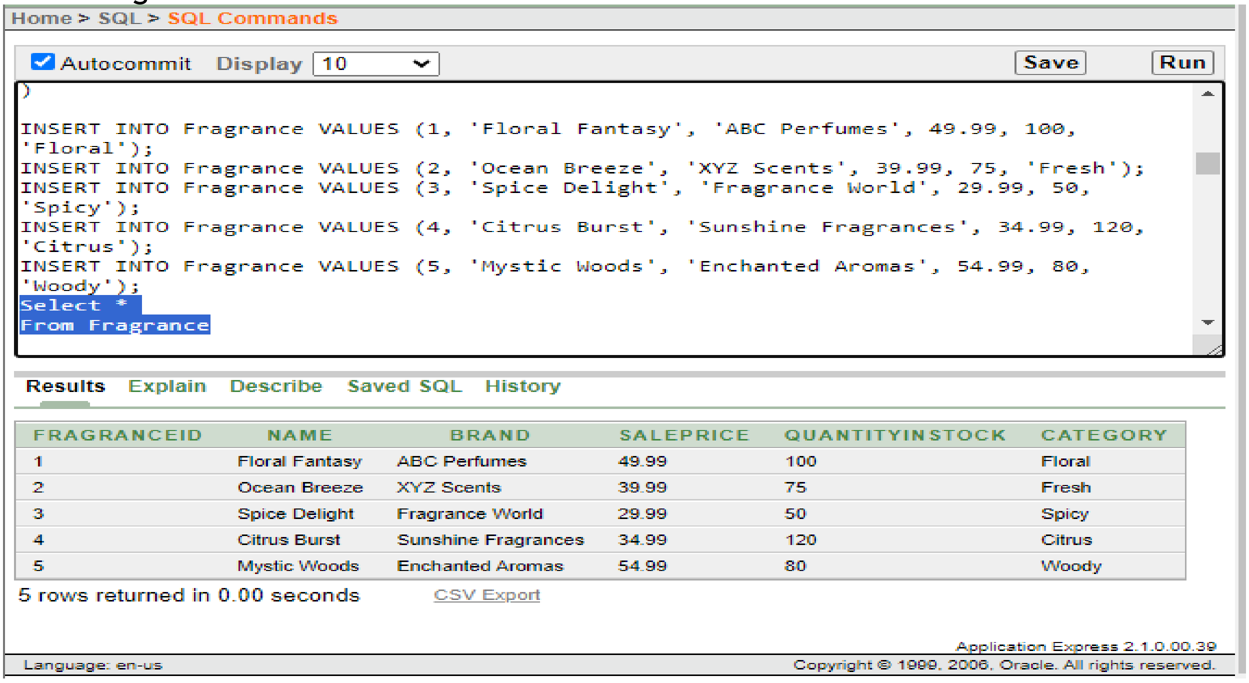
Fragrance Entity

INSERT INTO Fragrance VALUES (1, 'Floral Fantasy', 'ABC Perfumes', 49.99, 100, 'Floral');
INSERT INTO Fragrance VALUES (2, 'Ocean Breeze', 'XYZ Scents', 39.99, 75, 'Fresh');
INSERT INTO Fragrance VALUES (3, 'Spice Delight', 'Fragrance World', 29.99, 50, 'Spicy');
INSERT INTO Fragrance VALUES (4, 'Citrus Burst', 'Sunshine Fragrances', 34.99, 120, 'Citrus');
INSERT INTO Fragrance VALUES (5, 'Mystic Woods', 'Enchanted Aromas', 54.99, 80, 'Woody');
Select *
From Fragrance



```
)

INSERT INTO Fragrance VALUES (1, 'Floral Fantasy', 'ABC Perfumes', 49.99, 100,
'Floral');
INSERT INTO Fragrance VALUES (2, 'Ocean Breeze', 'XYZ Scents', 39.99, 75, 'Fresh');
INSERT INTO Fragrance VALUES (3, 'Spice Delight', 'Fragrance World', 29.99, 50,
'Spicy');
INSERT INTO Fragrance VALUES (4, 'Citrus Burst', 'Sunshine Fragrances', 34.99, 120,
'Citrus');
INSERT INTO Fragrance VALUES (5, 'Mystic Woods', 'Enchanted Aromas', 54.99, 80,
'Woody');
Select *
From Fragrance
```

FRAGRANCEID	NAME	BRAND	SALEPRICE	QUANTITYINSTOCK	CATEGORY
1	Floral Fantasy	ABC Perfumes	49.99	100	Floral
2	Ocean Breeze	XYZ Scents	39.99	75	Fresh
3	Spice Delight	Fragrance World	29.99	50	Spicy
4	Citrus Burst	Sunshine Fragrances	34.99	120	Citrus
5	Mystic Woods	Enchanted Aromas	54.99	80	Woody

5 rows returned in 0.00 seconds

CSV Export
Application Express 2.1.0.00.39
Language: en-us
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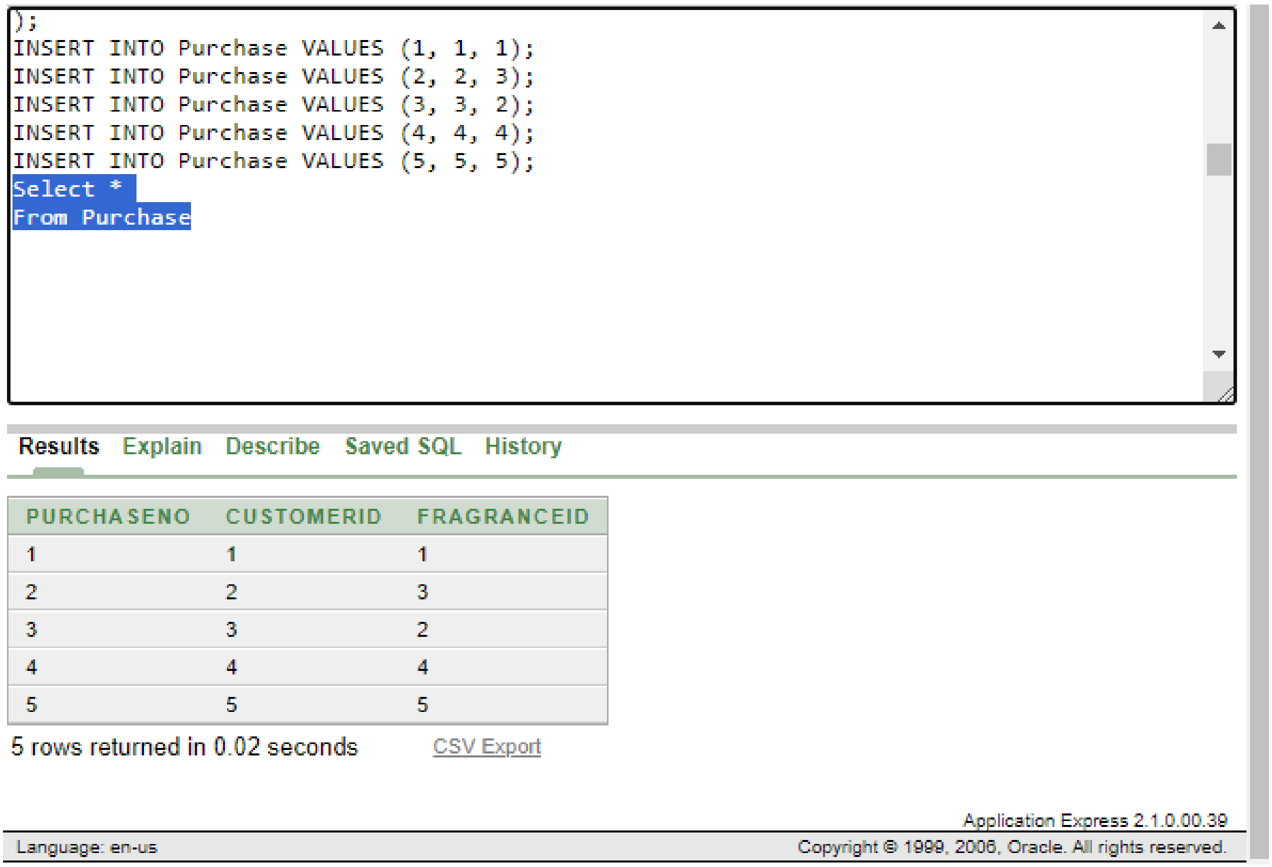
Purchase Entity

INSERT INTO Purchase VALUES (1, 1, 1);
INSERT INTO Purchase VALUES (2, 2, 3);
INSERT INTO Purchase VALUES (3, 3, 2);
INSERT INTO Purchase VALUES (4, 4, 4);
INSERT INTO Purchase VALUES (5, 5, 5);
Select *
From Purchase



```
);
INSERT INTO Purchase VALUES (1, 1, 1);
INSERT INTO Purchase VALUES (2, 2, 3);
INSERT INTO Purchase VALUES (3, 3, 2);
INSERT INTO Purchase VALUES (4, 4, 4);
INSERT INTO Purchase VALUES (5, 5, 5);
Select *
From Purchase
```

Results
Explain
Describe
Saved SQL
History

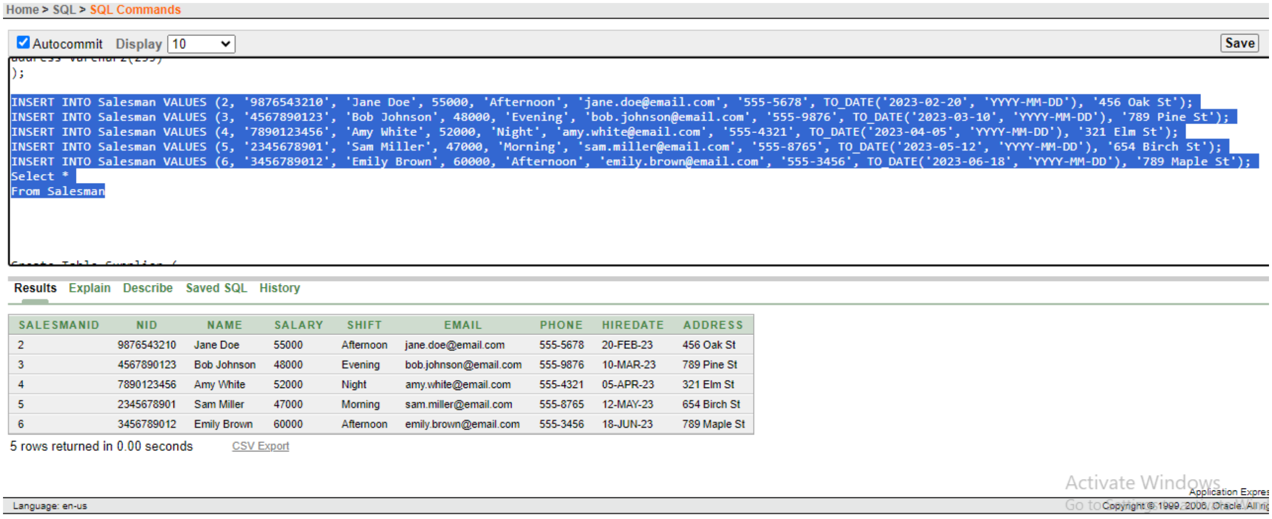
PURCHASENO	CUSTOMERID	FRAGRANCEID
1	1	1
2	2	3
3	3	2
4	4	4
5	5	5

5 rows returned in 0.02 seconds

CSV Export
Application Express 2.1.0.00.39
Language: en-us
Copyright © 1999, 2006, Oracle. All rights reserved.

Salesman Entity

INSERT INTO Salesman VALUES (2, '9876543210', 'Jane Doe', 55000, 'Afternoon', 'jane.doe@email.com', '555-5678', TO_DATE('2023-02-20', 'YYYY-MM-DD'), '456 Oak St');
INSERT INTO Salesman VALUES (3, '4567890123', 'Bob Johnson', 48000, 'Evening', 'bob.johnson@email.com', '555-9876', TO_DATE('2023-03-10', 'YYYY-MM-DD'), '789 Pine St');
INSERT INTO Salesman VALUES (4, '7890123456', 'Amy White', 52000, 'Night', 'amy.white@email.com', '555-4321', TO_DATE('2023-04-05', 'YYYY-MM-DD'), '321 Elm St');
INSERT INTO Salesman VALUES (5, '2345678901', 'Sam Miller', 47000, 'Morning', 'sam.miller@email.com', '555-8765', TO_DATE('2023-05-12', 'YYYY-MM-DD'), '654 Birch St');
INSERT INTO Salesman VALUES (6, '3456789012', 'Emily Brown', 60000, 'Afternoon', 'emily.brown@email.com', '555-3456', TO_DATE('2023-06-18', 'YYYY-MM-DD'), '789 Maple St');
Select *
From Salesman



```
address varchar2(255)
);

INSERT INTO Salesman VALUES (2, '9876543210', 'Jane Doe', 55000, 'Afternoon', 'jane.doe@email.com', '555-5678', TO_DATE('2023-02-20', 'YYYY-MM-DD'), '456 Oak St');
INSERT INTO Salesman VALUES (3, '4567890123', 'Bob Johnson', 48000, 'Evening', 'bob.johnson@email.com', '555-9876', TO_DATE('2023-03-10', 'YYYY-MM-DD'), '789 Pine St');
INSERT INTO Salesman VALUES (4, '7890123456', 'Amy White', 52000, 'Night', 'amy.white@email.com', '555-4321', TO_DATE('2023-04-05', 'YYYY-MM-DD'), '321 Elm St');
INSERT INTO Salesman VALUES (5, '2345678901', 'Sam Miller', 47000, 'Morning', 'sam.miller@email.com', '555-8765', TO_DATE('2023-05-12', 'YYYY-MM-DD'), '654 Birch St');
INSERT INTO Salesman VALUES (6, '3456789012', 'Emily Brown', 60000, 'Afternoon', 'emily.brown@email.com', '555-3456', TO_DATE('2023-06-18', 'YYYY-MM-DD'), '789 Maple St');
Select *
From Salesman



Create Table Supplier (
```

SALESMANID	NID	NAME	SALARY	SHIFT	EMAIL	PHONE	HIREDATE	ADDRESS
2	9876543210	Jane Doe	55000	Afternoon	jane.doe@email.com	555-5678	20-FEB-23	456 Oak St
3	4567890123	Bob Johnson	48000	Evening	bob.johnson@email.com	555-9876	10-MAR-23	789 Pine St
4	7890123456	Amy White	52000	Night	amy.white@email.com	555-4321	05-APR-23	321 Elm St
5	2345678901	Sam Miller	47000	Morning	sam.miller@email.com	555-8765	12-MAY-23	654 Birch St
6	3456789012	Emily Brown	60000	Afternoon	emily.brown@email.com	555-3456	18-JUN-23	789 Maple St

5 rows returned in 0.00 seconds CSV Export

Activate Windows
Go to Settings to activate Windows.
Application Express
Language: en-us
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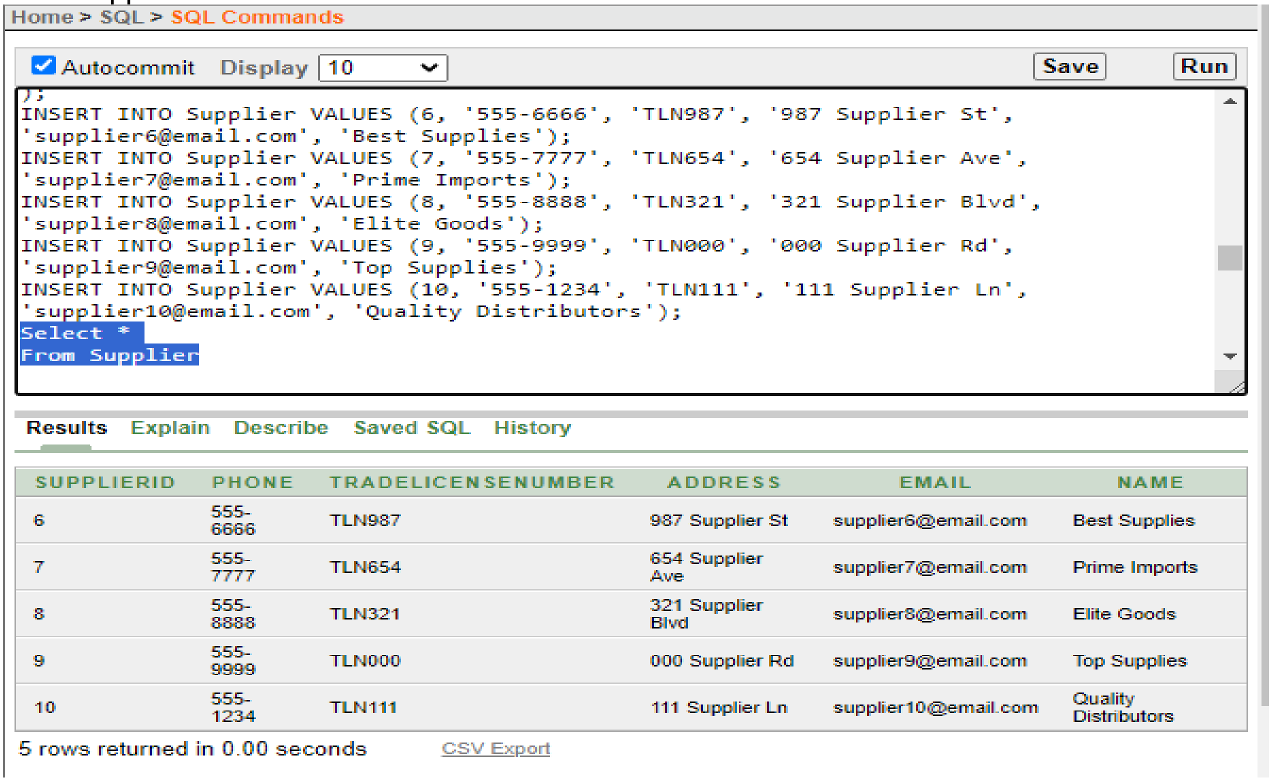
Supplier Entity

INSERT INTO Supplier VALUES (6, '555-6666', 'TLN987', '987 Supplier St', 'supplier6@email.com', 'Best Supplies');
INSERT INTO Supplier VALUES (7, '555-7777', 'TLN654', '654 Supplier Ave', 'supplier7@email.com', 'Prime Imports');
INSERT INTO Supplier VALUES (8, '555-8888', 'TLN321', '321 Supplier Blvd', 'supplier8@email.com', 'Elite Goods');
INSERT INTO Supplier VALUES (9, '555-9999', 'TLN000', '000 Supplier Rd', 'supplier9@email.com', 'Top Supplies');
INSERT INTO Supplier VALUES (10, '555-1234', 'TLN111', '111 Supplier Ln', 'supplier10@email.com', 'Quality Distributors');
Select *
From Supplier



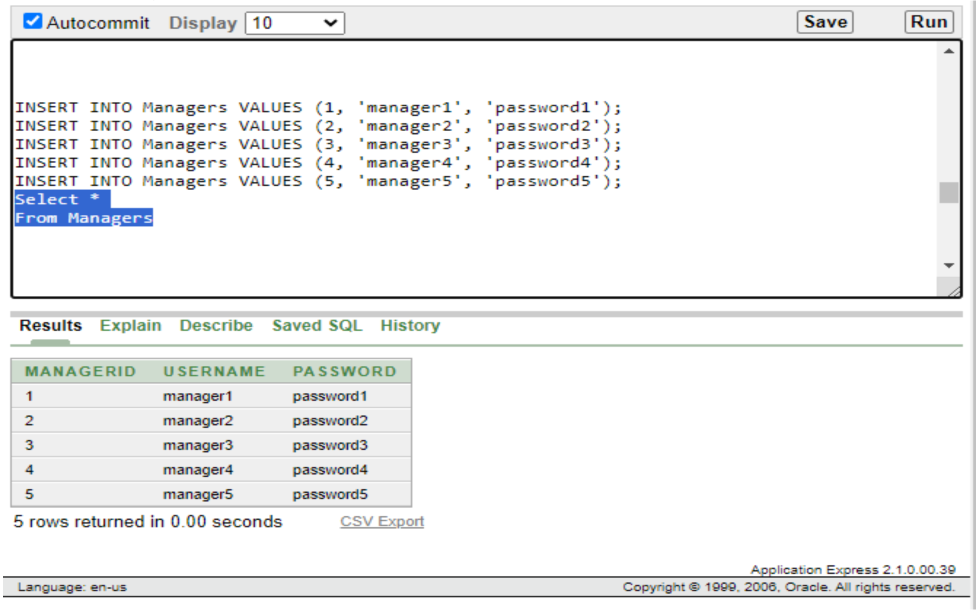
```
);
INSERT INTO Supplier VALUES (6, '555-6666', 'TLN987', '987 Supplier St',
'supplier6@email.com', 'Best Supplies');
INSERT INTO Supplier VALUES (7, '555-7777', 'TLN654', '654 Supplier Ave',
'supplier7@email.com', 'Prime Imports');
INSERT INTO Supplier VALUES (8, '555-8888', 'TLN321', '321 Supplier Blvd',
'supplier8@email.com', 'Elite Goods');
INSERT INTO Supplier VALUES (9, '555-9999', 'TLN000', '000 Supplier Rd',
'supplier9@email.com', 'Top Supplies');
INSERT INTO Supplier VALUES (10, '555-1234', 'TLN111', '111 Supplier Ln',
'supplier10@email.com', 'Quality Distributors');
Select *
From Supplier
```

SUPPLIERID	PHONE	TRADELICENSENUMBER	ADDRESS	EMAIL	NAME
6	555-6666	TLN987	987 Supplier St	supplier6@email.com	Best Supplies
7	555-7777	TLN654	654 Supplier Ave	supplier7@email.com	Prime Imports
8	555-8888	TLN321	321 Supplier Blvd	supplier8@email.com	Elite Goods
9	555-9999	TLN000	000 Supplier Rd	supplier9@email.com	Top Supplies
10	555-1234	TLN111	111 Supplier Ln	supplier10@email.com	Quality Distributors

5 rows returned in 0.00 seconds CSV Export

Managers Entity

INSERT INTO Managers VALUES (1, 'manager1', 'password1');
INSERT INTO Managers VALUES (2, 'manager2', 'password2');
INSERT INTO Managers VALUES (3, 'manager3', 'password3');
INSERT INTO Managers VALUES (4, 'manager4', 'password4');
INSERT INTO Managers VALUES (5, 'manager5', 'password5');
Select *
From Managers



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```
INSERT INTO Managers VALUES (1, 'manager1', 'password1');
INSERT INTO Managers VALUES (2, 'manager2', 'password2');
INSERT INTO Managers VALUES (3, 'manager3', 'password3');
INSERT INTO Managers VALUES (4, 'manager4', 'password4');
INSERT INTO Managers VALUES (5, 'manager5', 'password5');
Select *
From Managers
```

MANAGERID	USERNAME	PASSWORD
1	manager1	password1
2	manager2	password2
3	manager3	password3
4	manager4	password4
5	manager5	password5

5 rows returned in 0.00 seconds

Application Express 2.1.0.00.39

Language: en-us

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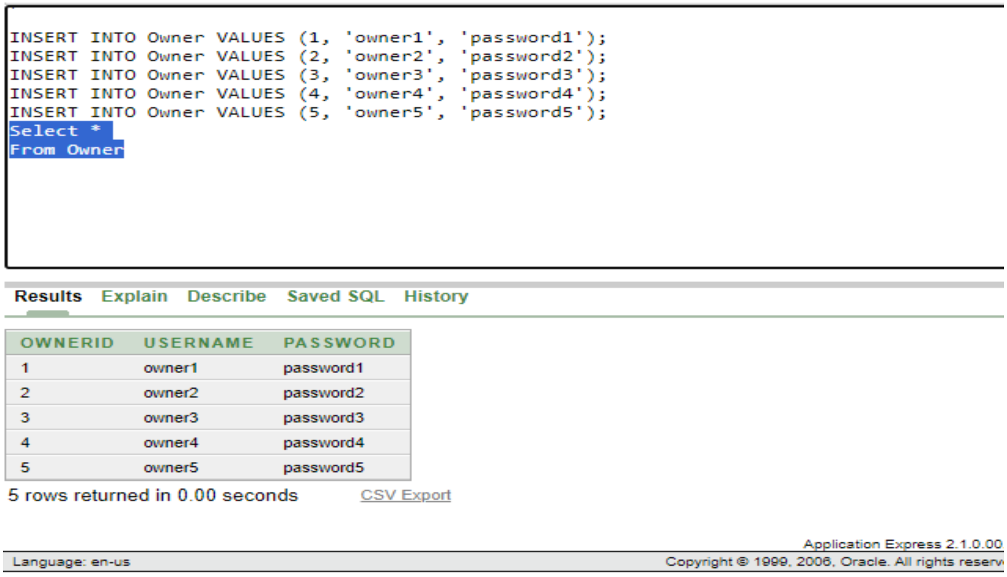
Owner Entity

INSERT INTO Owner VALUES (1, 'owner1', 'password1');
INSERT INTO Owner VALUES (2, 'owner2', 'password2');
INSERT INTO Owner VALUES (3, 'owner3', 'password3');
INSERT INTO Owner VALUES (4, 'owner4', 'password4');
INSERT INTO Owner VALUES (5, 'owner5', 'password5');
Select *
From Owner



```
INSERT INTO Owner VALUES (1, 'owner1', 'password1');
INSERT INTO Owner VALUES (2, 'owner2', 'password2');
INSERT INTO Owner VALUES (3, 'owner3', 'password3');
INSERT INTO Owner VALUES (4, 'owner4', 'password4');
INSERT INTO Owner VALUES (5, 'owner5', 'password5');
Select *
From Owner
```

OWNERID	USERNAME	PASSWORD
1	owner1	password1
2	owner2	password2
3	owner3	password3
4	owner4	password4
5	owner5	password5

5 rows returned in 0.00 seconds

Application Express 2.1.0.00

Language: en-us

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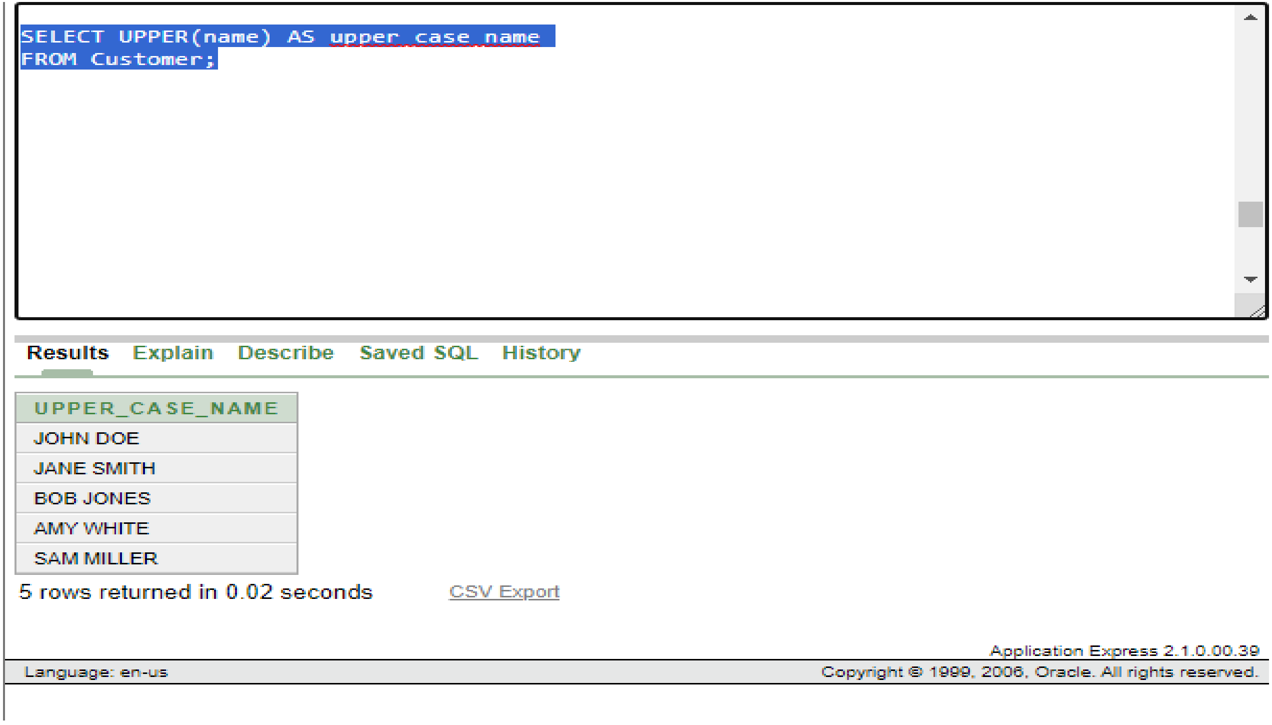
11. Query Writing:

SELECT UPPER(name) AS upper_case_name
FROM Customer;



```
SELECT UPPER(name) AS upper_case_name
FROM Customer;
```

UPPER_CASE_NAME
JOHN DOE
JANE SMITH
BOB JONES
AMY WHITE
SAM MILLER

5 rows returned in 0.02 seconds

Application Express 2.1.0.00.39

Language: en-us

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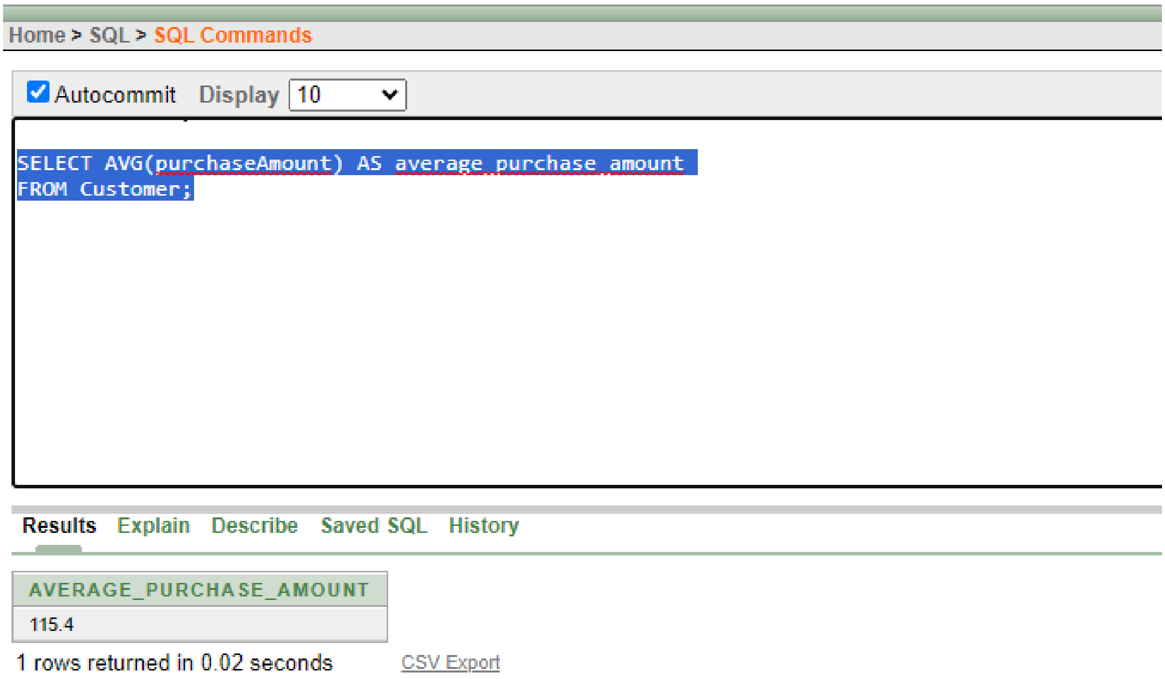
SELECT AVG(purchaseAmount) AS average_purchase_amount
FROM Customer;



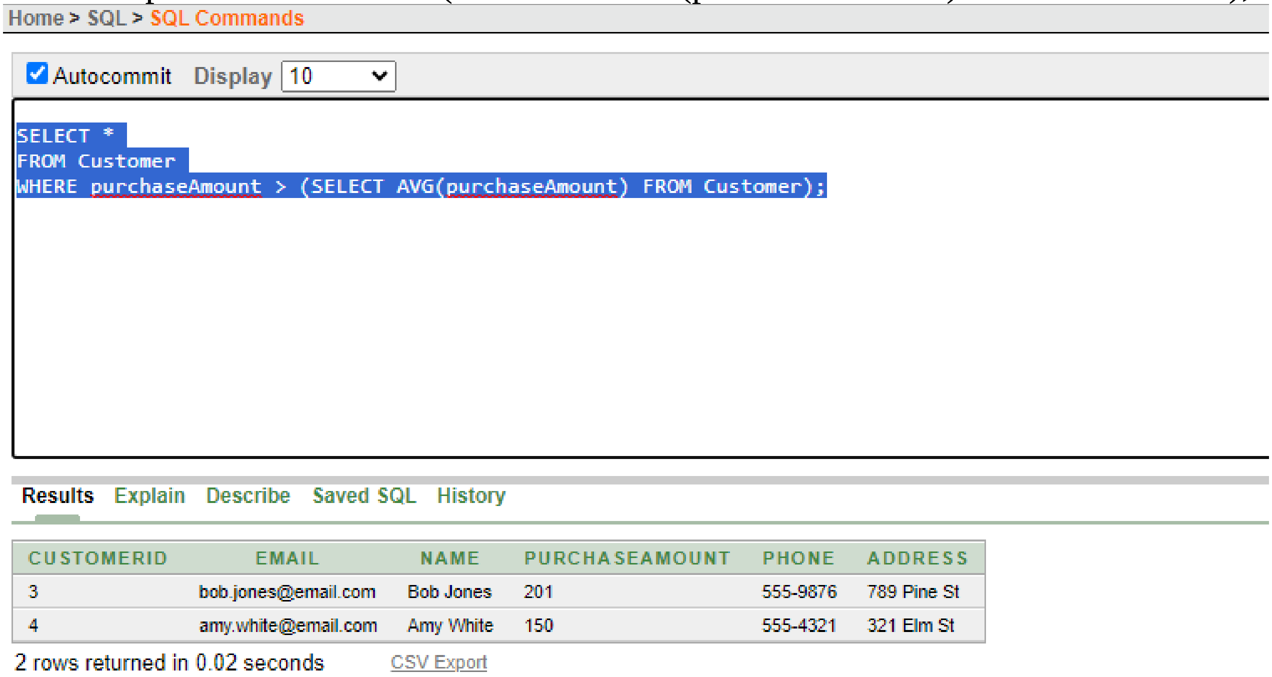
☑ Autocommit Display 10

```
SELECT AVG(purchaseAmount) AS average_purchase_amount
FROM Customer;
```

AVERAGE_PURCHASE_AMOUNT
115.4

1 rows returned in 0.02 seconds

SELECT *
FROM Customer
WHERE purchaseAmount > (SELECT AVG(purchaseAmount) FROM Customer);

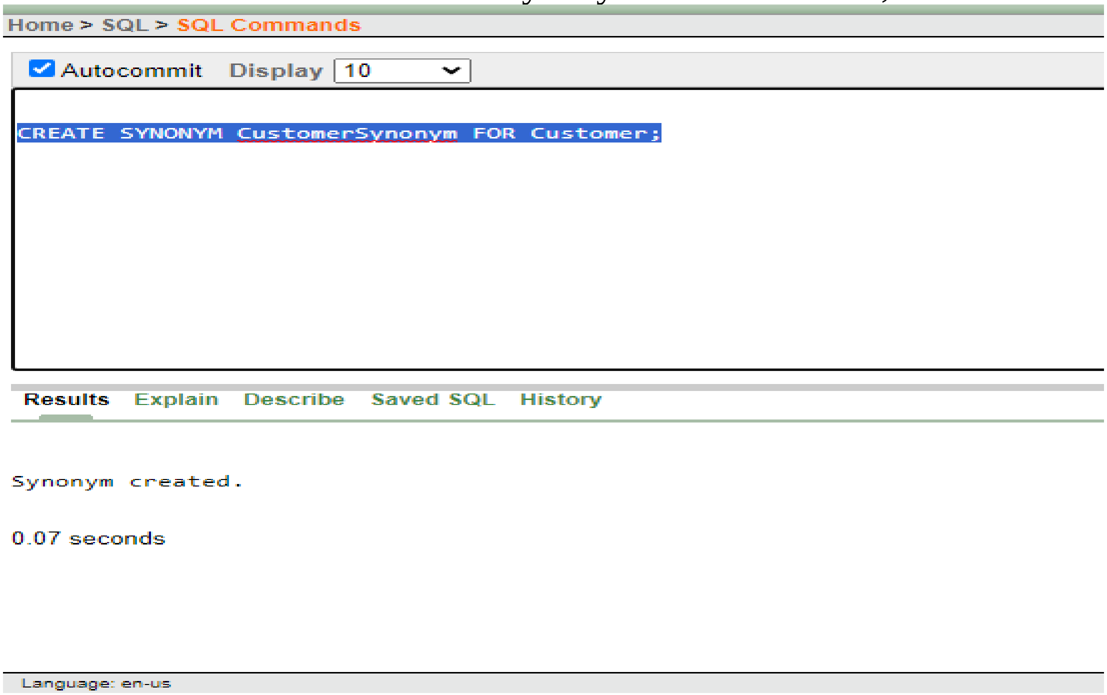

Home > SQL > SQL Commands
☑ Autocommit Display 10
Results Explain Describe Saved SQL History
CSV Export

```
SELECT *
FROM Customer
WHERE purchaseAmount > (SELECT AVG(purchaseAmount) FROM Customer);
```

CUSTOMERID	EMAIL	NAME	PURCHASEAMOUNT	PHONE	ADDRESS
3	bob.jones@email.com	Bob Jones	201	555-9876	789 Pine St
4	amy.white@email.com	Amy White	150	555-4321	321 Elm St

2 rows returned in 0.02 seconds

CREATE SYNONYM CustomerSynonym FOR Customer;

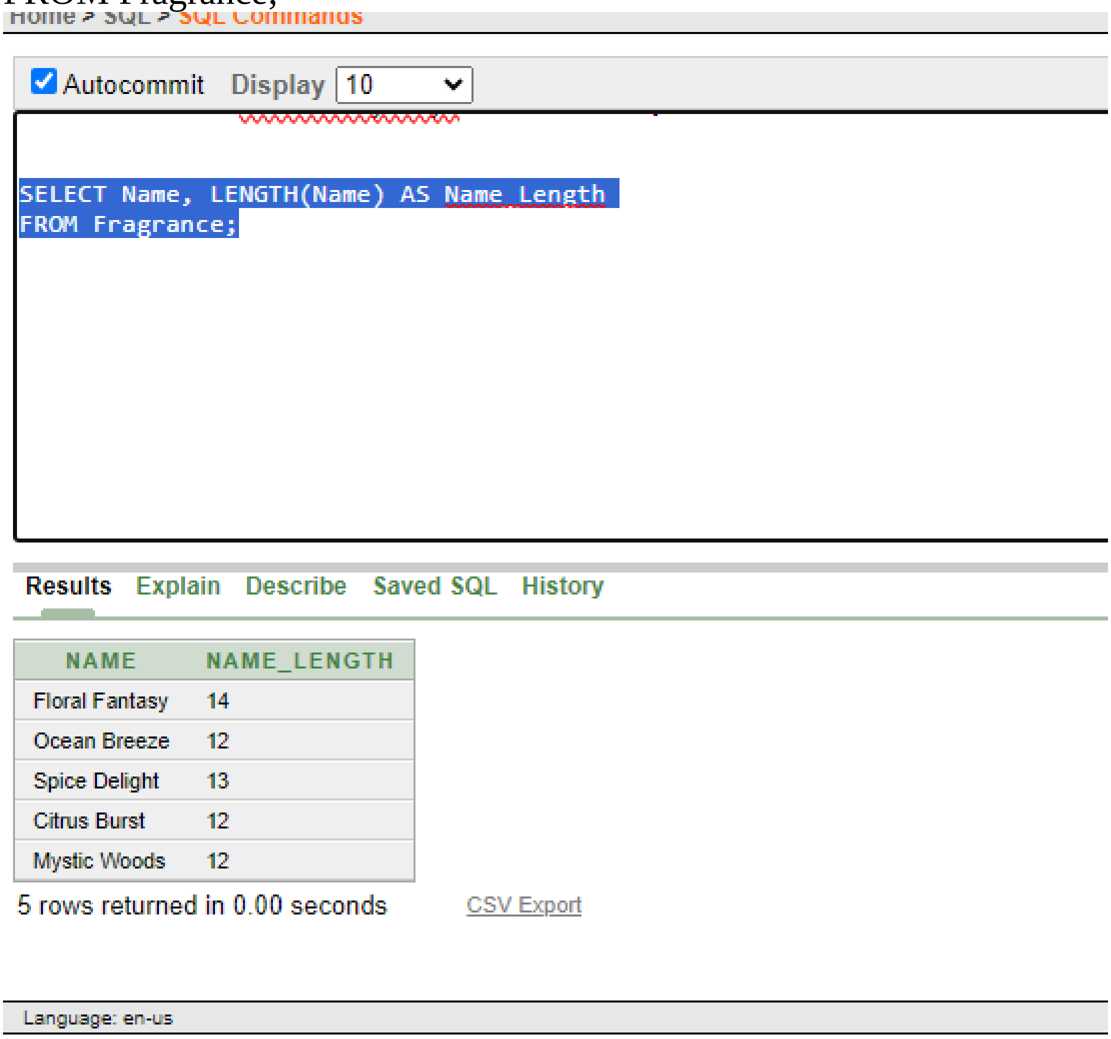

Home > SQL > SQL Commands
☑ Autocommit Display 10
Results Explain Describe Saved SQL History
Language: en-us

```
CREATE SYNONYM CustomerSynonym FOR Customer;
```

```
Synonym created.

0.07 seconds
```

```
SELECT Name, LENGTH(Name) AS Name_Length
FROM Fragrance;
```



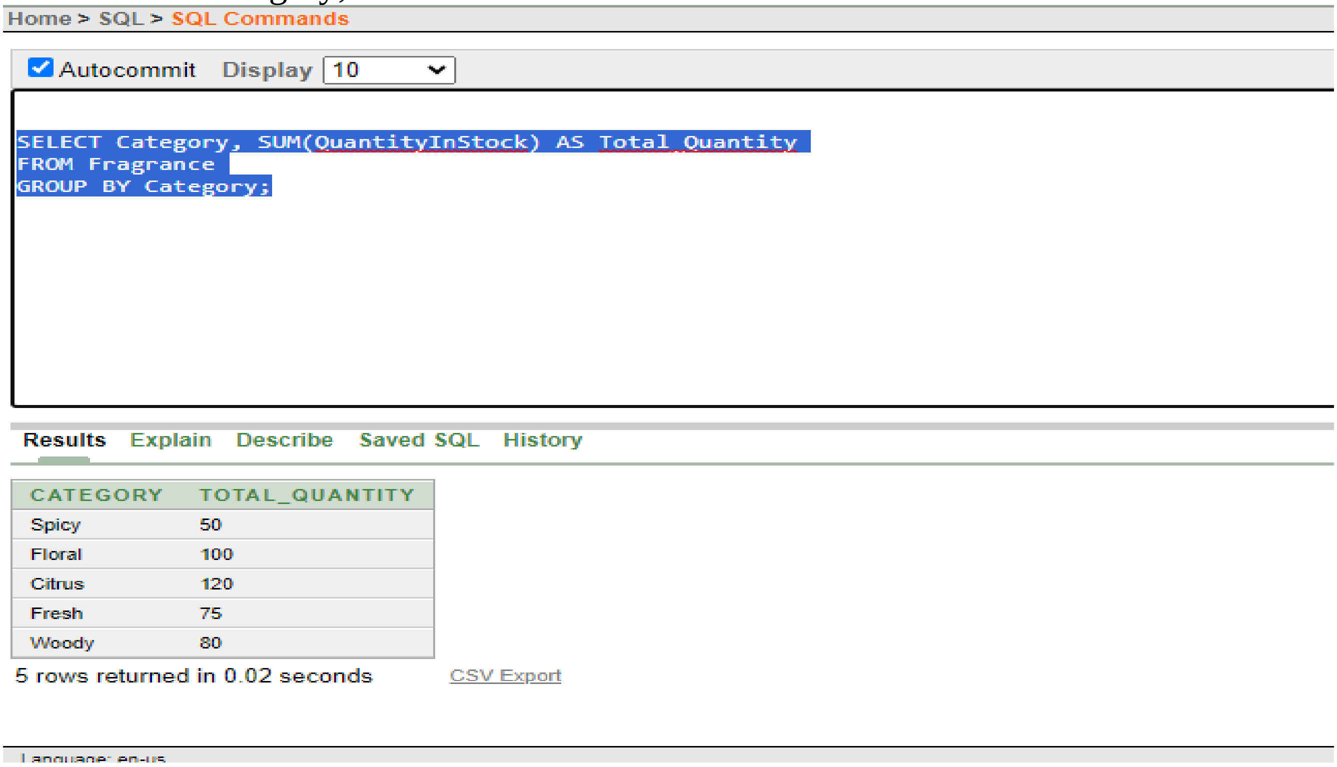
☑ Autocommit Display 10

```
SELECT Name, LENGTH(Name) AS Name_Length
FROM Fragrance;
```

NAME	NAME_LENGTH
Floral Fantasy	14
Ocean Breeze	12
Spice Delight	13
Citrus Burst	12
Mystic Woods	12

5 rows returned in 0.00 seconds

```
SELECT Category, SUM(QuantityInStock) AS Total_Quantity
FROM Fragrance
GROUP BY Category;
```



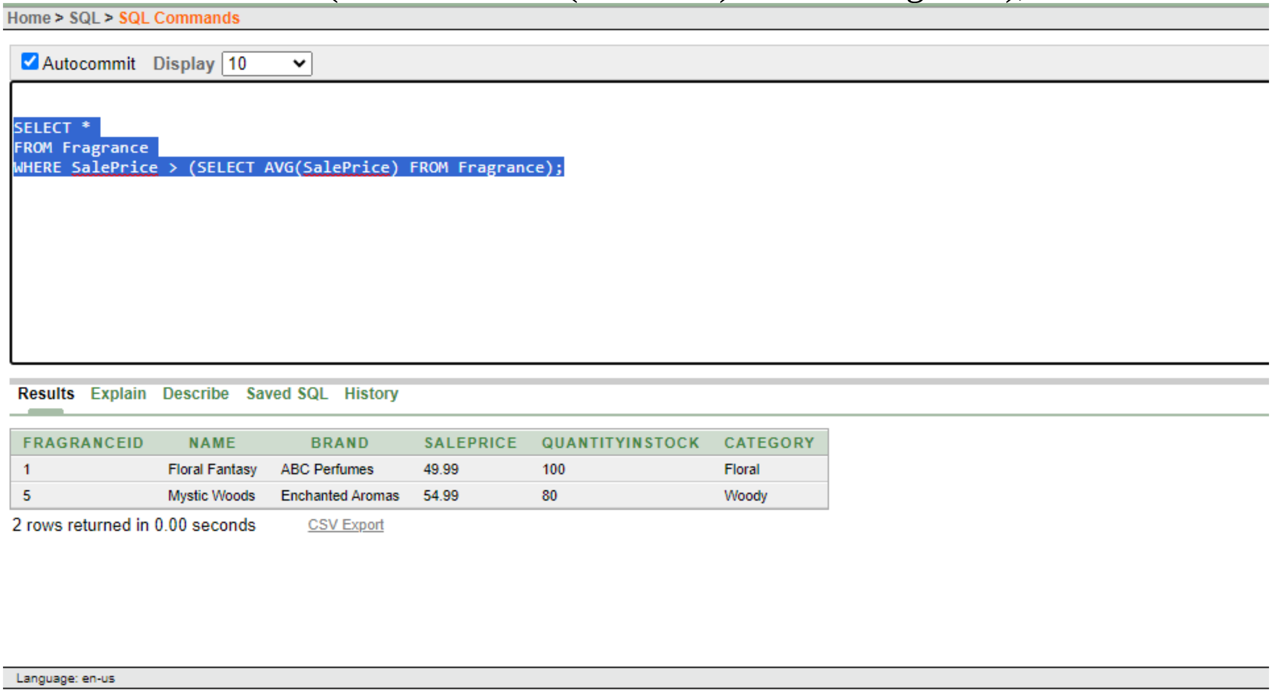
☑ Autocommit Display 10

```
SELECT Category, SUM(QuantityInStock) AS Total_Quantity
FROM Fragrance
GROUP BY Category;
```

CATEGORY	TOTAL_QUANTITY
Spicy	50
Floral	100
Citrus	120
Fresh	75
Woody	80

5 rows returned in 0.02 seconds

SELECT *
FROM Fragrance
WHERE SalePrice > (SELECT AVG(SalePrice) FROM Fragrance);



Home > SQL > SQL Commands
☑ Autocommit Display 10

```
SELECT *
FROM Fragrance
WHERE SalePrice > (SELECT AVG(SalePrice) FROM Fragrance);
```

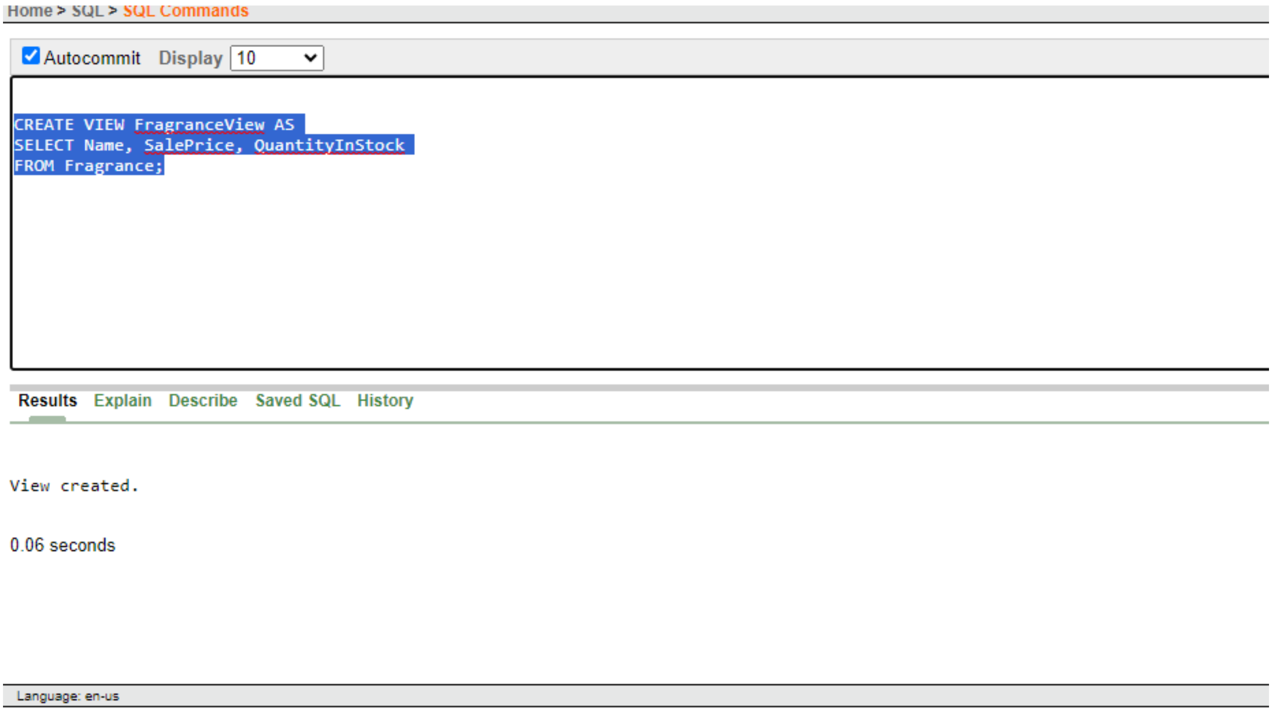
Results Explain Describe Saved SQL History

FRAGRANCEID	NAME	BRAND	SALEPRICE	QUANTITYINSTOCK	CATEGORY
1	Floral Fantasy	ABC Perfumes	49.99	100	Floral
5	Mystic Woods	Enchanted Aromas	54.99	80	Woody

2 rows returned in 0.00 seconds

CSV Export
Language: en-us

CREATE VIEW FragranceView AS
SELECT Name, SalePrice, QuantityInStock
FROM Fragrance;



Home > SQL > SQL Commands
☑ Autocommit Display 10

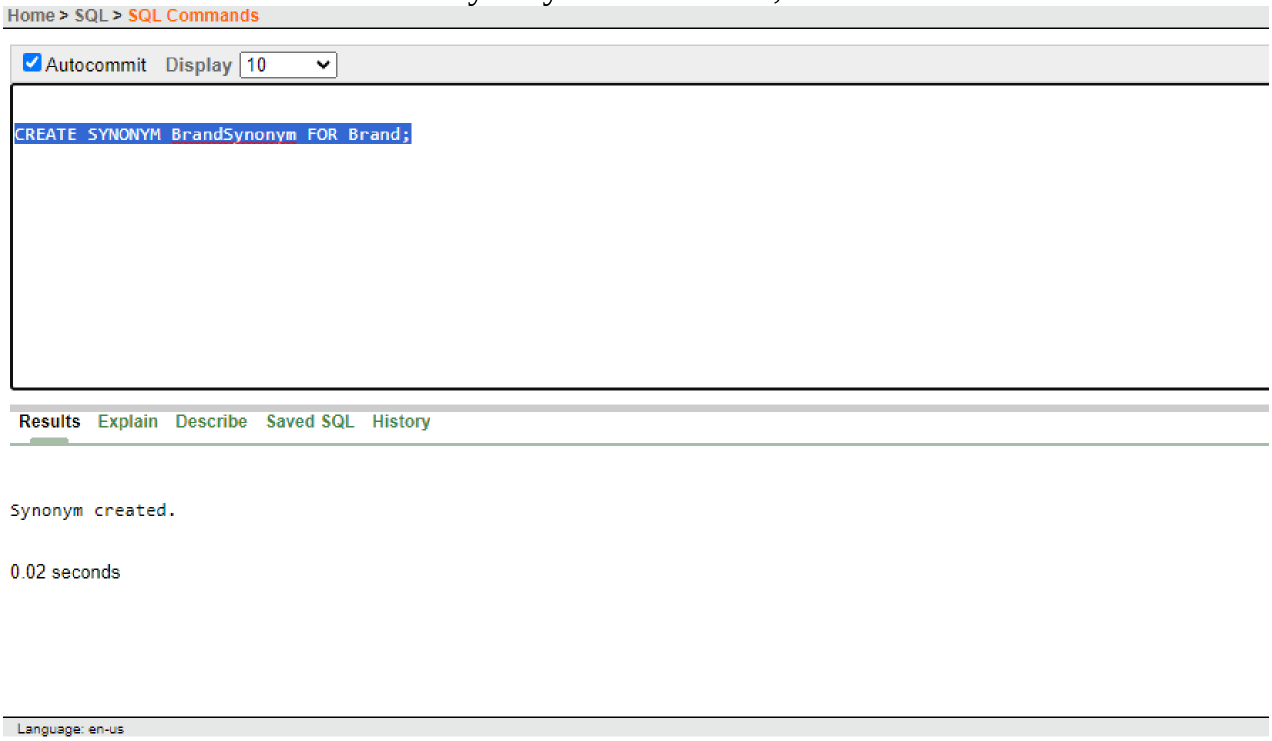
```
CREATE VIEW FragranceView AS
SELECT Name, SalePrice, QuantityInStock
FROM Fragrance;
```

Results Explain Describe Saved SQL History

```
View created.
```

0.06 seconds

CREATE SYNONYM BrandSynonym FOR Brand;

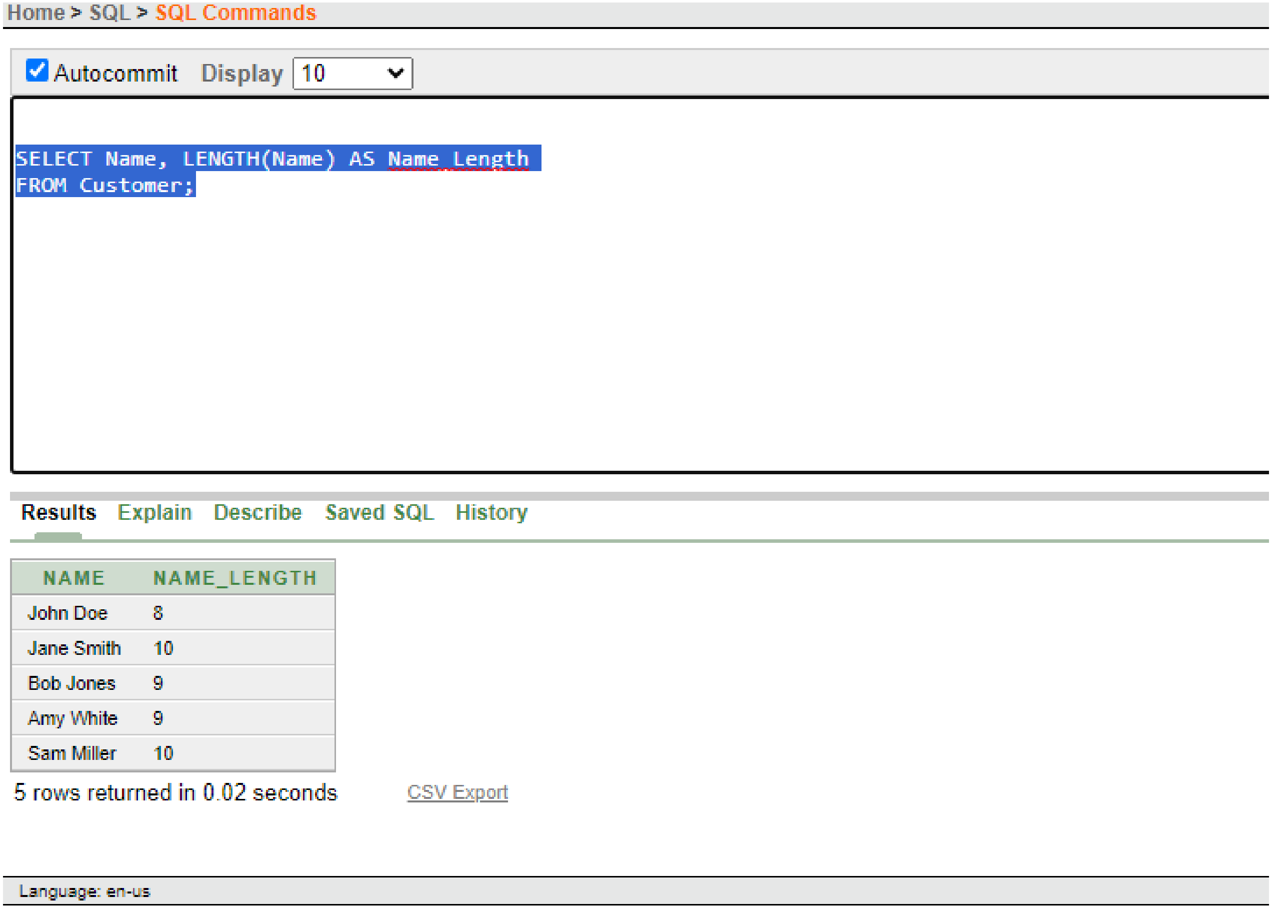


```
CREATE SYNONYM BrandSynonym FOR Brand;
```

```
Synonym created.

0.02 seconds
```

SELECT Name, LENGTH(Name) AS Name_Length
FROM Customer;

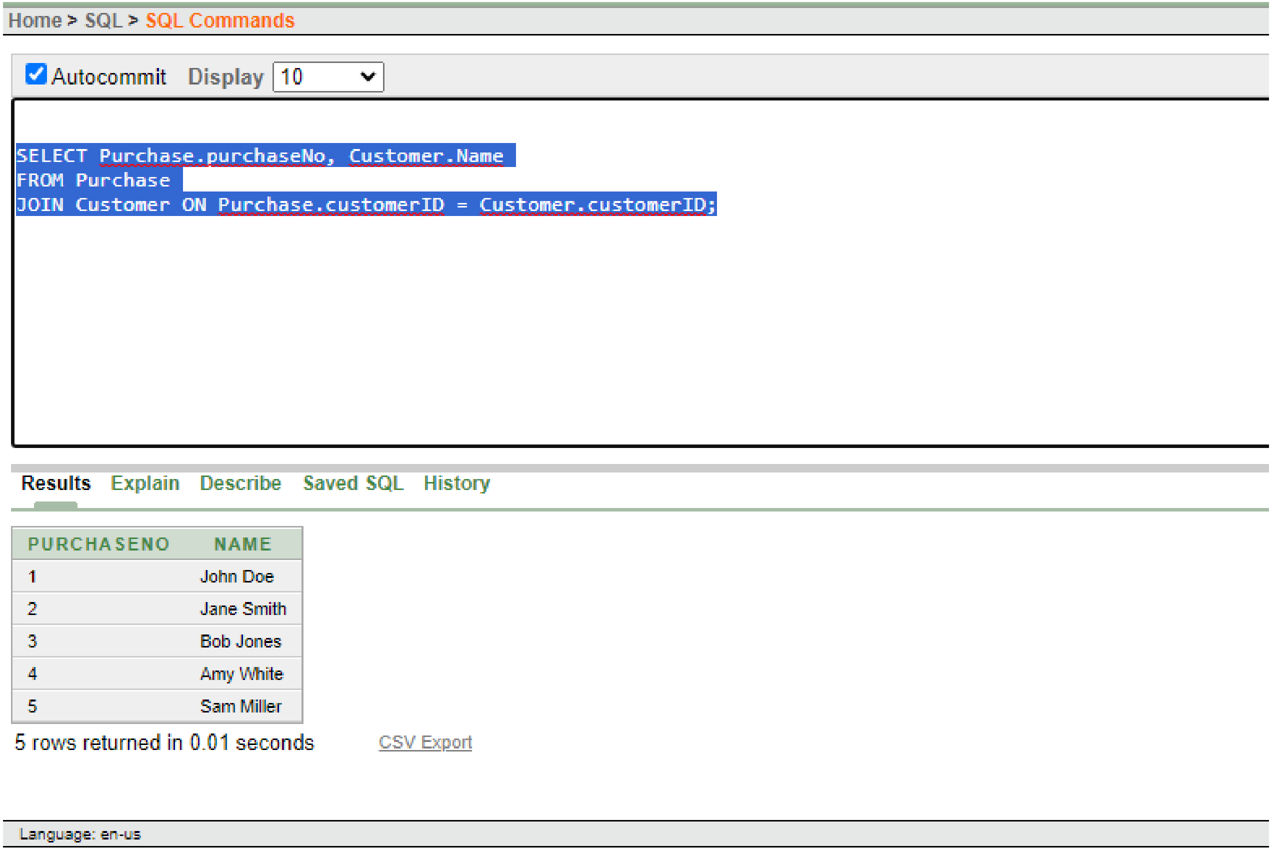


```
SELECT Name, LENGTH(Name) AS Name_Length
FROM Customer;
```

NAME	NAME_LENGTH
John Doe	8
Jane Smith	10
Bob Jones	9
Amy White	9
Sam Miller	10

5 rows returned in 0.02 seconds

SELECT Purchase.purchaseNo, Customer.Name
FROM Purchase
JOIN Customer ON Purchase.customerID = Customer.customerID;



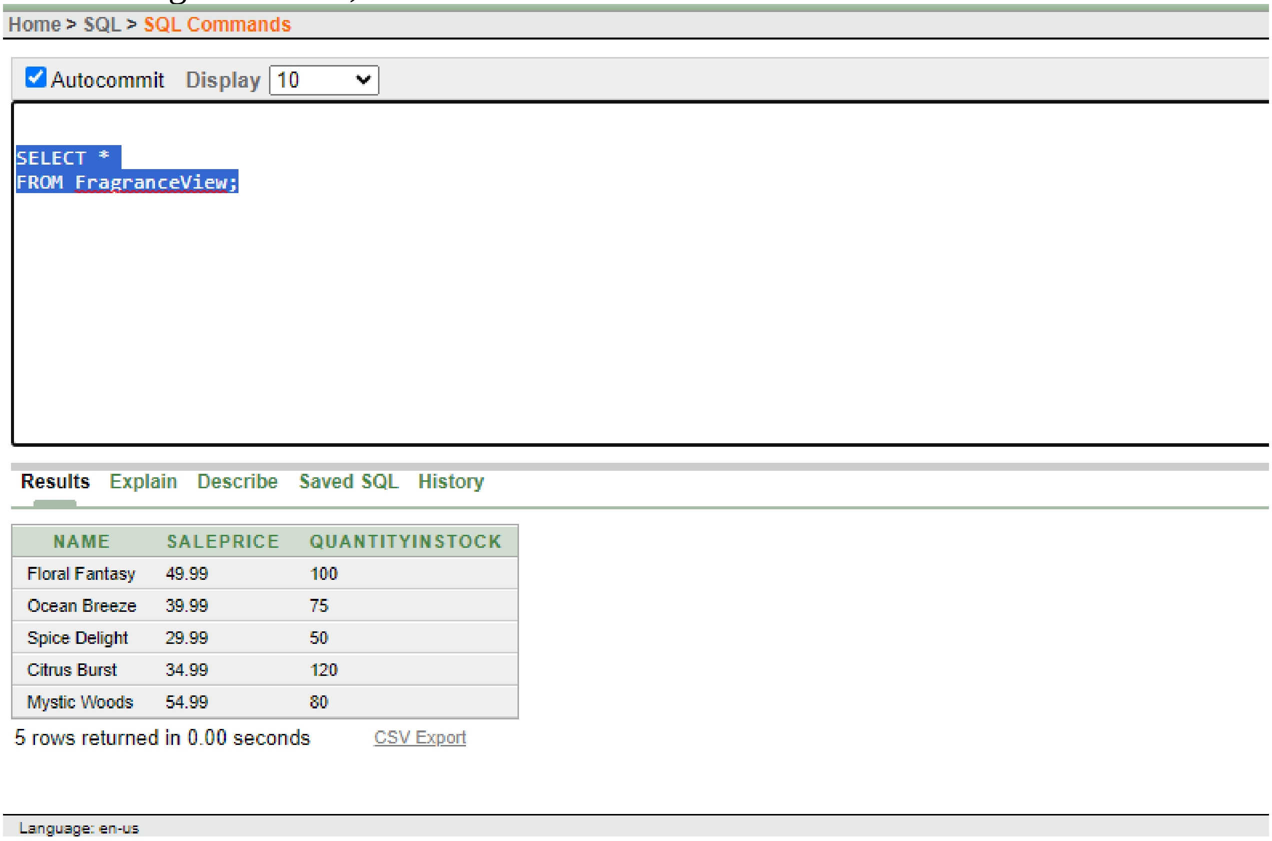
Home > SQL > SQL Commands
☑ Autocommit Display 10
Results Explain Describe Saved SQL History
CSV Export
Language: en-us

```
SELECT Purchase.purchaseNo, Customer.Name
FROM Purchase
JOIN Customer ON Purchase.customerID = Customer.customerID;
```

PURCHASENO	NAME
1	John Doe
2	Jane Smith
3	Bob Jones
4	Amy White
5	Sam Miller

5 rows returned in 0.01 seconds

SELECT *
FROM FragranceView;



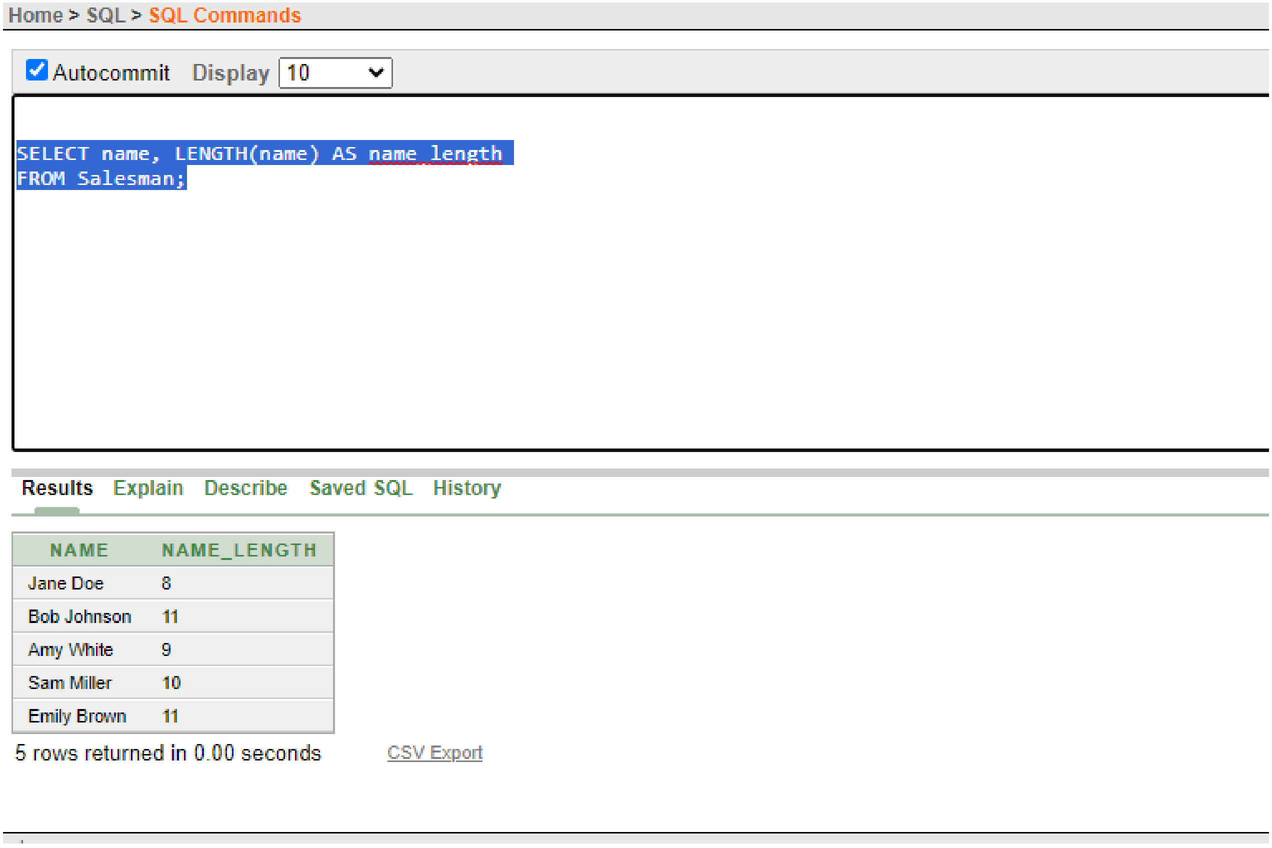
Home > SQL > SQL Commands
☑ Autocommit Display 10
Results Explain Describe Saved SQL History
CSV Export
Language: en-us

```
SELECT *
FROM FragranceView;
```

NAME	SALEPRICE	QUANTITYINSTOCK
Floral Fantasy	49.99	100
Ocean Breeze	39.99	75
Spice Delight	29.99	50
Citrus Burst	34.99	120
Mystic Woods	54.99	80

5 rows returned in 0.00 seconds

```
SELECT name, LENGTH(name) AS name_length
FROM Salesman;
```

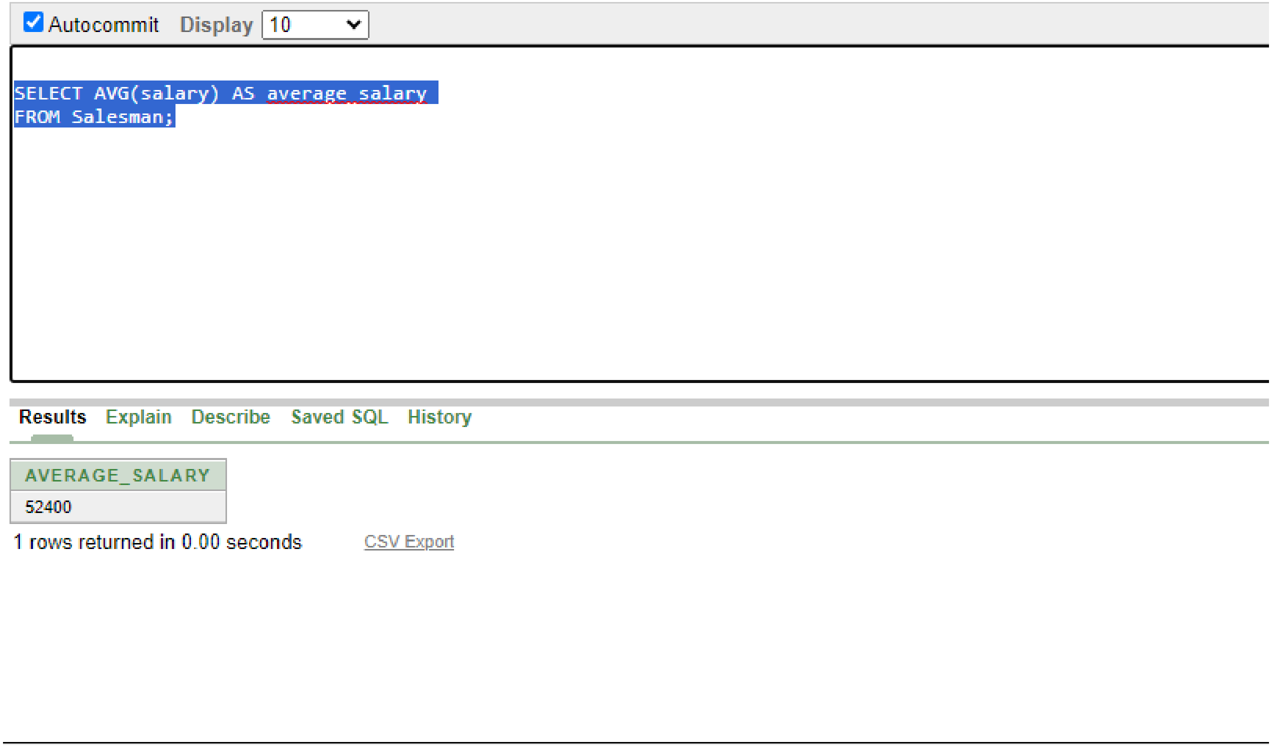


```
SELECT name, LENGTH(name) AS name_length
FROM Salesman;
```

NAME	NAME_LENGTH
Jane Doe	8
Bob Johnson	11
Amy White	9
Sam Miller	10
Emily Brown	11

5 rows returned in 0.00 seconds

```
SELECT AVG(salary) AS average_salary
FROM Salesman;
```

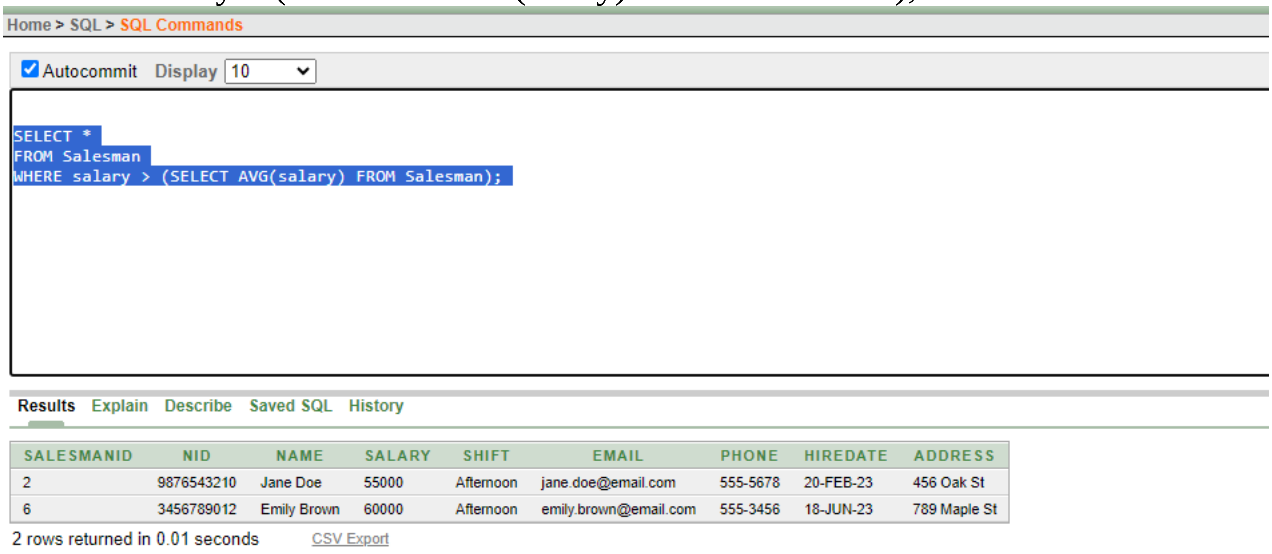


```
SELECT AVG(salary) AS average_salary
FROM Salesman;
```

AVERAGE_SALARY
52400

1 rows returned in 0.00 seconds

```
SELECT *
FROM Salesman
WHERE salary > (SELECT AVG(salary) FROM Salesman);
```

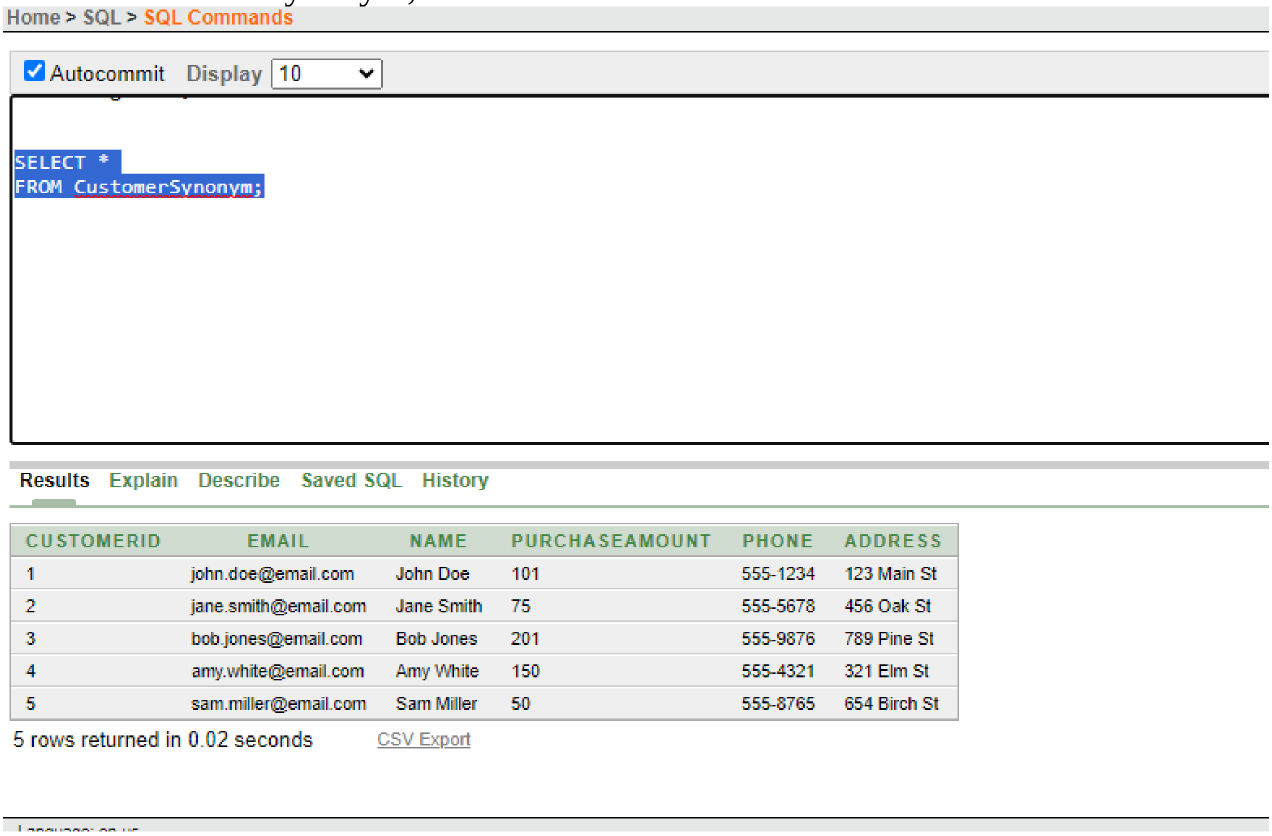


```
SELECT *
FROM Salesman
WHERE salary > (SELECT AVG(salary) FROM Salesman);
```

SALESMANID	NID	NAME	SALARY	SHIFT	EMAIL	PHONE	HIREDATE	ADDRESS
2	9876543210	Jane Doe	55000	Afternoon	jane.doe@email.com	555-5678	20-FEB-23	456 Oak St
6	3456789012	Emily Brown	60000	Afternoon	emily.brown@email.com	555-3456	18-JUN-23	789 Maple St

2 rows returned in 0.01 seconds

```
SELECT *
FROM CustomerSynonym;
```

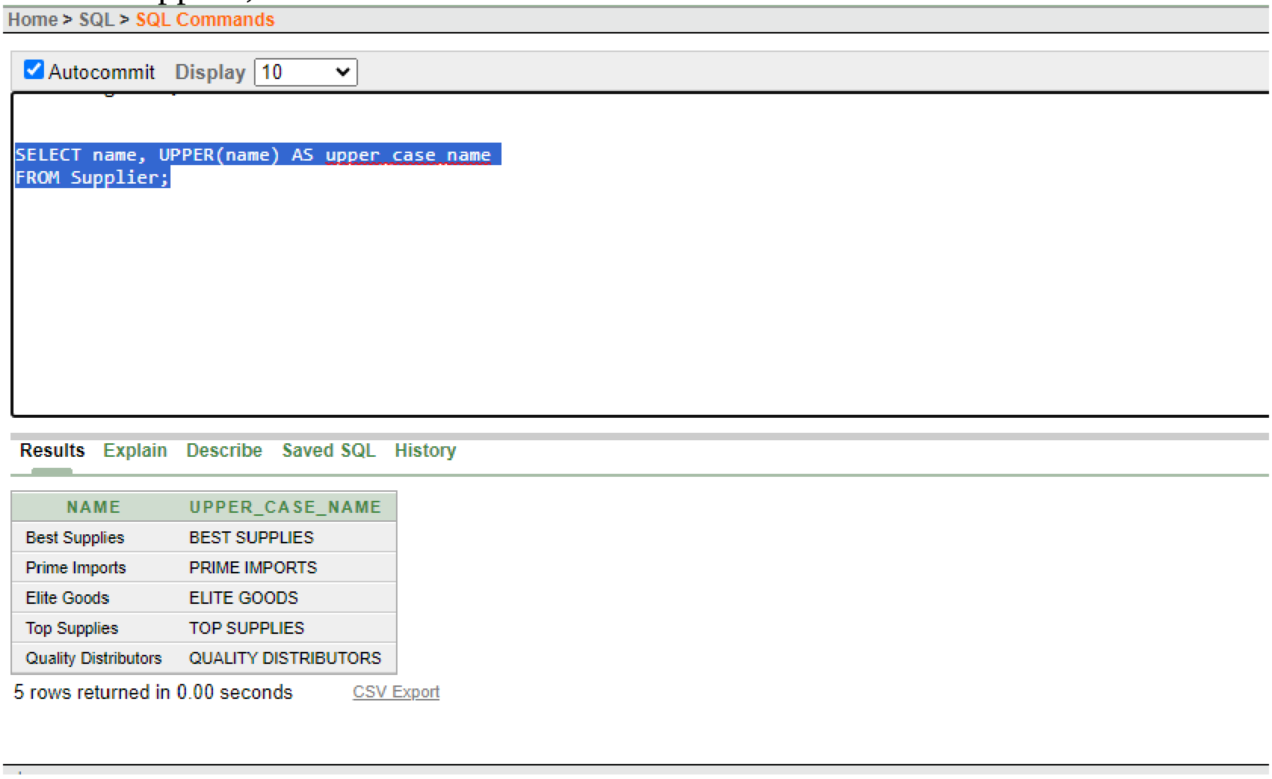


```
SELECT *
FROM CustomerSynonym;
```

CUSTOMERID	EMAIL	NAME	PURCHASEAMOUNT	PHONE	ADDRESS
1	john.doe@email.com	John Doe	101	555-1234	123 Main St
2	jane.smith@email.com	Jane Smith	75	555-5678	456 Oak St
3	bob.jones@email.com	Bob Jones	201	555-9876	789 Pine St
4	amy.white@email.com	Amy White	150	555-4321	321 Elm St
5	sam.miller@email.com	Sam Miller	50	555-8765	654 Birch St

5 rows returned in 0.02 seconds

SELECT name, UPPER(name) AS upper_case_name
FROM Supplier;

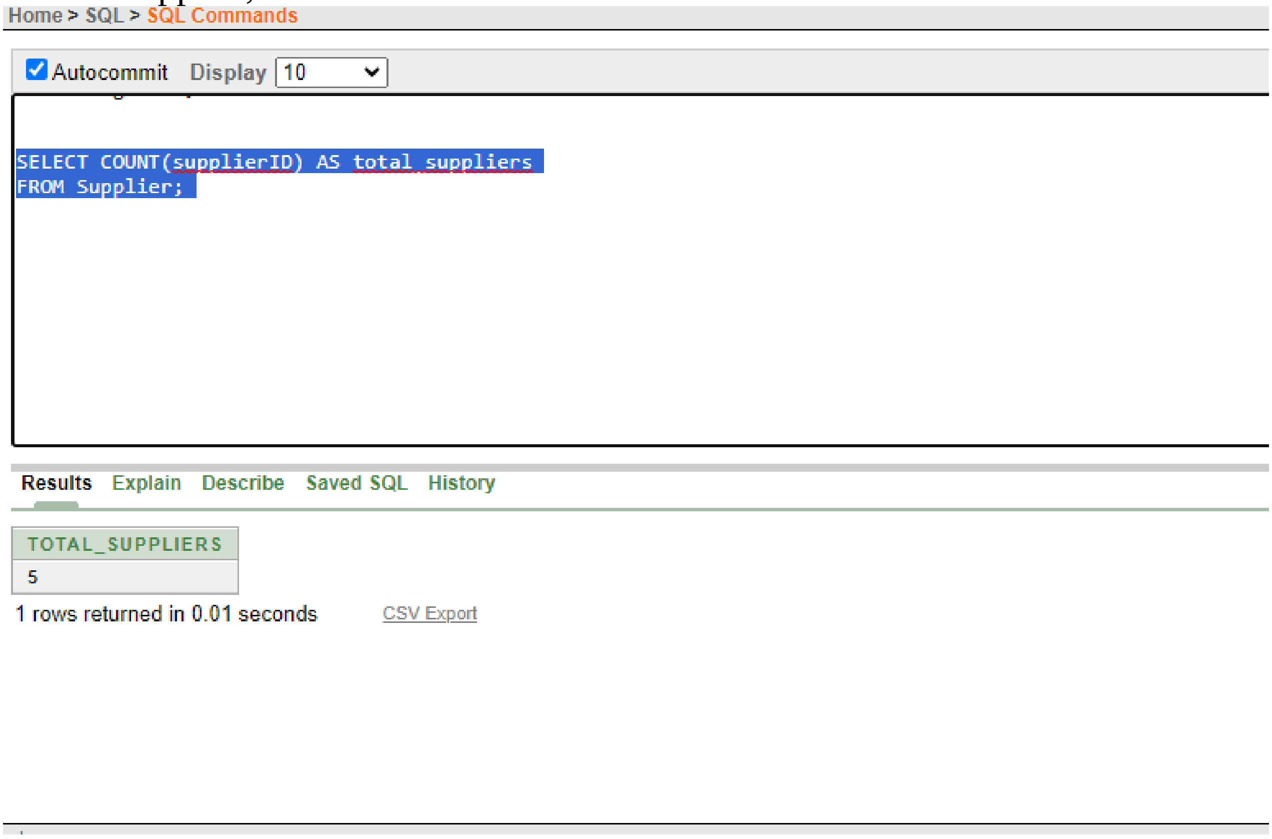


```
SELECT name, UPPER(name) AS upper_case_name
FROM Supplier;
```

NAME	UPPER_CASE_NAME
Best Supplies	BEST SUPPLIES
Prime Imports	PRIME IMPORTS
Elite Goods	ELITE GOODS
Top Supplies	TOP SUPPLIES
Quality Distributors	QUALITY DISTRIBUTORS

5 rows returned in 0.00 seconds

SELECT COUNT(supplierID) AS total_suppliers
FROM Supplier;

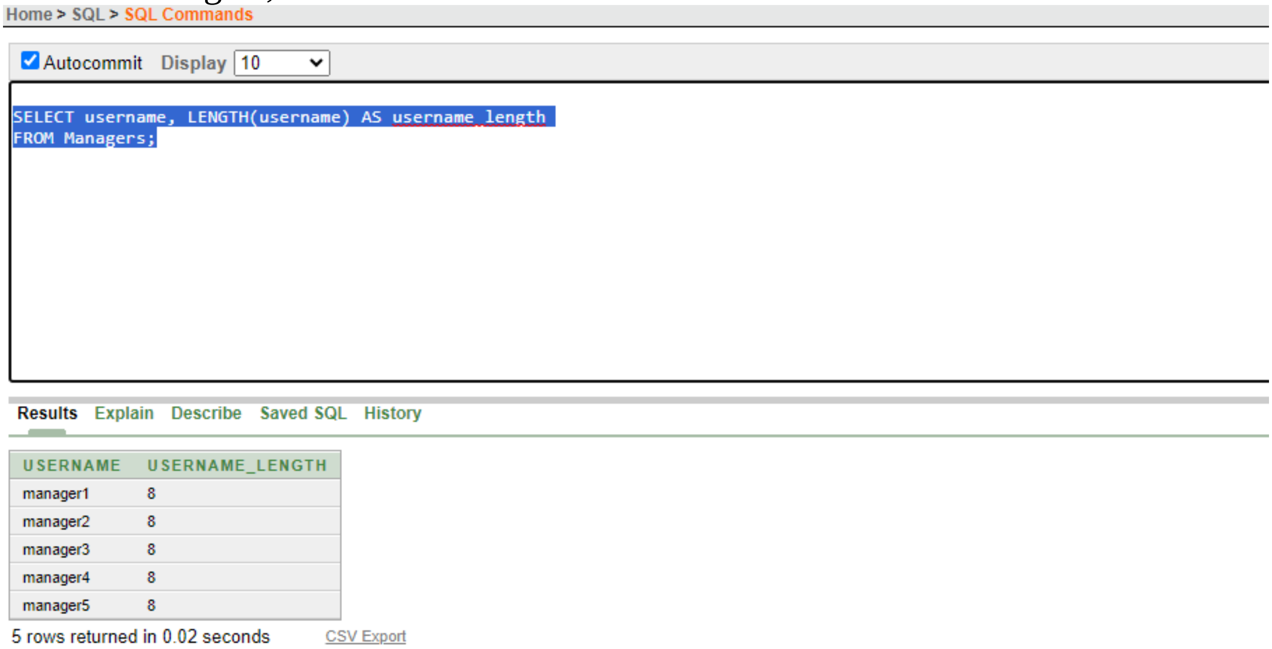


```
SELECT COUNT(supplierID) AS total_suppliers
FROM Supplier;
```

TOTAL_SUPPLIERS
5

1 rows returned in 0.01 seconds

SELECT username, LENGTH(username) AS username_length
FROM Managers;

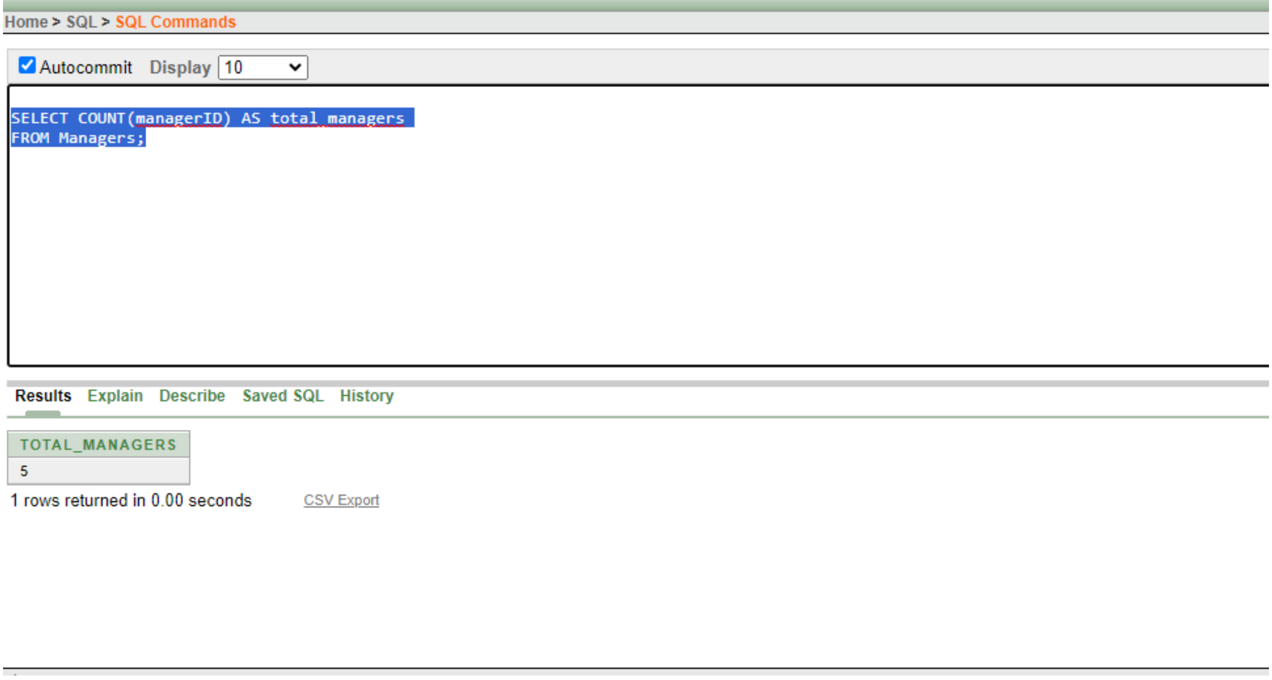


```
SELECT username, LENGTH(username) AS username_length
FROM Managers;
```

USERNAME	USERNAME_LENGTH
manager1	8
manager2	8
manager3	8
manager4	8
manager5	8

5 rows returned in 0.02 seconds

SELECT COUNT(managerID) AS total_managers
FROM Managers;

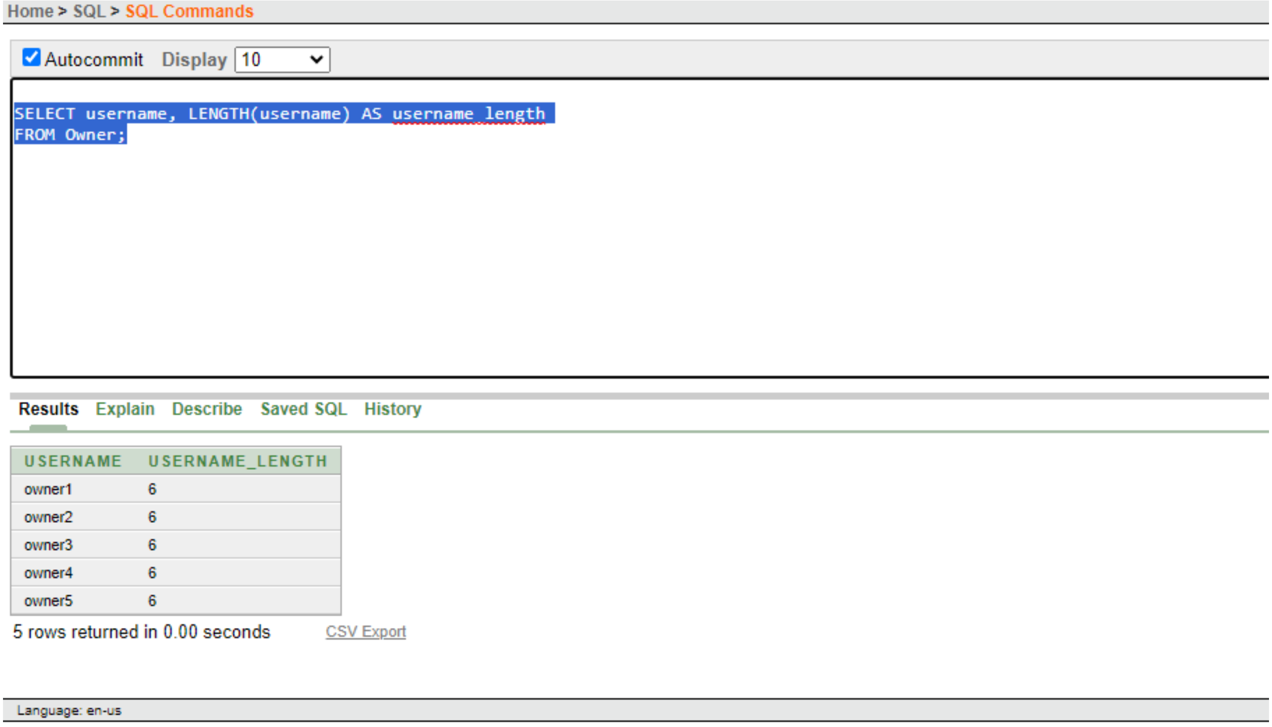


```
SELECT COUNT(managerID) AS total_managers
FROM Managers;
```

TOTAL_MANAGERS
5

1 rows returned in 0.00 seconds

SELECT username, LENGTH(username) AS username_length
FROM Owner;



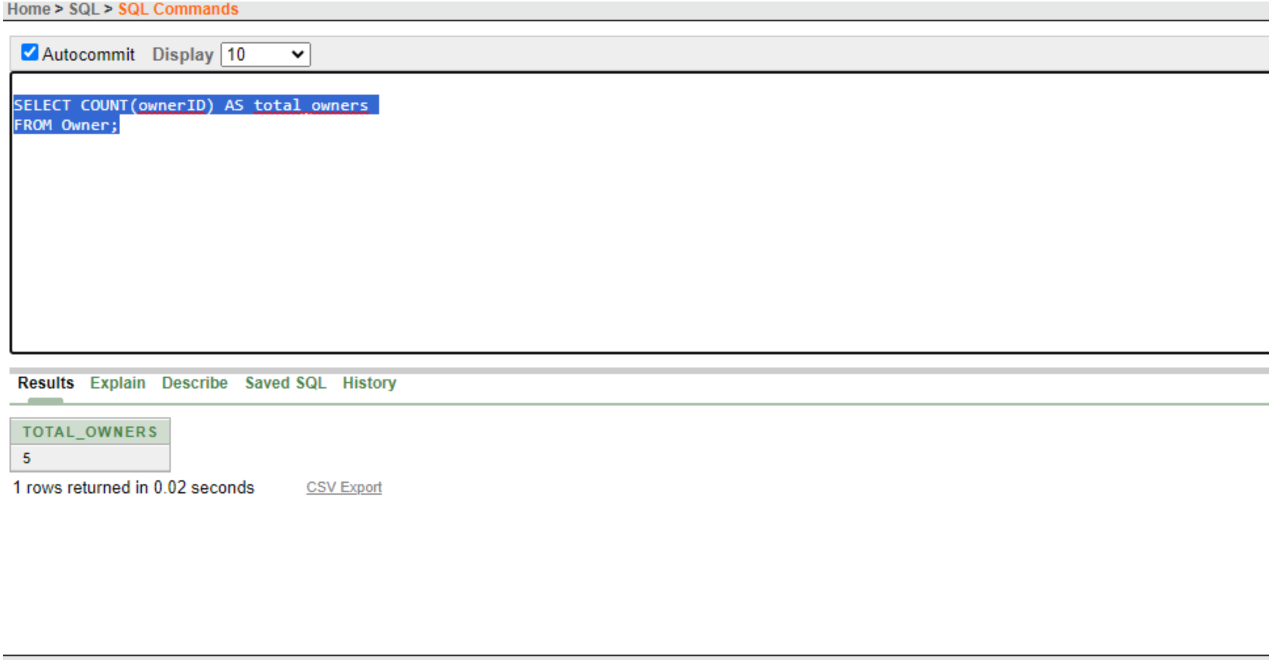
☑ Autocommit Display 10

```
SELECT username, LENGTH(username) AS username_length
FROM Owner;
```

USERNAME	USERNAME_LENGTH
owner1	6
owner2	6
owner3	6
owner4	6
owner5	6

5 rows returned in 0.00 seconds

SELECT COUNT(ownerID) AS total_owners
FROM Owner;



☑ Autocommit Display 10

```
SELECT COUNT(ownerID) AS total_owners
FROM Owner;
```

TOTAL_OWNERS
5

1 rows returned in 0.02 seconds

12. Relational Algebra

13. Conclusion: The establishment of a premium fragrance shop in Bangladesh holds great promise, with its focus on quality, personalized service, and a captivating shopping environment. As you move forward with the project, a commitment to ongoing improvement and responsiveness to customer needs will be key to establishing and maintaining the shop's position as the premier fragrance destination in the region. Good luck with your venture, and I'm here to help if you have any specific questions or need further assistance!