

Lab 4: Basic Selects

Purpose:

Do the basic SQL selections.

Deliverables:

Multiple screenshots, as described through the Labs – Screenshots page 3.

Scripts that you used to carry out the actions.

Steps:

*Do this lab against the **Northwind** database.*

For each of the tasks, please provide a **screenshot** showing your login ID, the script used, as well as selected data (refer to Labs – Screenshots page 3).

1. Select all data from the Order Details table.

```
select * from [Order Details]
```

The screenshot shows the Microsoft SQL Server Management Studio (SSMS) interface. The title bar says "Windows 10". The main window has two panes: "Object Explorer" on the left and "SQLQuery1.sql - LCS-VC-MSSQL-02.ad.syr.edu.Northwind (rokhande (69))" on the right. In the query pane, the command "use Northwind" is followed by "select * from [Order Details]". Below the pane, the status bar shows "LCS-VC-MSSQL-02.ad.syr.edu ... rokhande (69) | Nor". The results pane displays a table with 12 rows of data from the Order Details table. The columns are OrderID, ProductID, UnitPrice, Quantity, and Discount. The data is as follows:

OrderID	ProductID	UnitPrice	Quantity	Discount
1	10248	11	14.00	12
2	10248	42	9.80	10
3	10248	72	34.80	5
4	10249	14	18.60	9
5	10249	51	42.40	40
6	10250	41	7.70	10
7	10250	51	42.40	35
8	10250	65	16.80	15
9	10251	22	16.80	6
10	10251	57	15.60	15
11	10251	65	16.80	20
12	10252	20	64.80	40

The status bar at the bottom of the SSMS window also shows "Ready" and "Type here to search".

2. Select all data from the Customers table, ordered by **ContactName**.

```
select * from Customers order by ContactName
```

```

use Northwind
select * from Customers order by ContactName

```

CustomerID	CompanyName	ContactName	ContactTitle	Address	City	Region	PostalCode	Country	Phone	Fax
1	ROMERY	Alejandra Camino	Accounting Manager	Gran Vía, 1	Madrid	NULL	28001	Spain	(91) 745 6200	(91) 745 6210
2	MORGK	Alexander Feuer	Marketing Assistant	Heestr. 22	Leipzig	NULL	04179	Germany	(0342) 023176	NULL
3	ANATR	Ana Trujillo Emparedados y helados	Owner	Avda. de la Constitución 2222	México D.F.	NULL	05021	Mexico	(5) 555-4729	(5) 555-3745
4	TRADH	Anabela Dominguez	Sales Representative	Av. Inés de Castro, 414	Sao Paulo	SP	05634-030	Brazil	(11) 555-2167	(11) 555-2168
5	GOURL	Artourmet Lanchonetes	Sales Associate	Av. Brasil, 442	Campinas	SP	04876-786	Brazil	(11) 555-9482	NULL
6	EASTC	Eastern Connection	Sales Agent	35 King George	London	NULL	WX3 6FW	UK	(171) 555-0297	(171) 555-3373
7	LAMAI	Annette Roulet	Sales Manager	1 rue Alsace-Lorraine	Toulouse	NULL	31000	France	61.77.61.10	61.77.61.11
8	ANTON	Antonio Moreno Taqueria	Owner	Mataderos 2312	México D.F.	NULL	05023	Mexico	(5) 555-3932	NULL
9	FAMIA	Ata Cruz	Marketing Assistant	Rua Crôa, 92	Sao Paulo	SP	05442-030	Brazil	(11) 555-9857	NULL
10	SPUR	Art Braunschweiger	Sales Manager	P.O. Box 555	Lander	WY	82520	USA	(307) 555-4680	(307) 555-6525
11	QUADE	Bernardo Batista	Accounting Manager	Rua da Panificadora, 12	Rio de Janeiro	RJ	02389-673	Brazil	(21) 555-4252	(21) 555-4545
12	FRANR	Carine Schmitt	Marketing Manager	54, rue Royale	Nantes	NULL	44000	France	40.32.21.21	40.32.21.20

Query executed successfully.

3. Select all data from the Orders table, ordered by OrderDate, oldest date on top.

select * from Orders order by OrderDate Asc

```

use Northwind
select * from Orders order by OrderDate Asc

```

OrderID	CustomerID	EmployeeID	OrderDate	RequiredDate	ShippedDate	ShipVia	Freight	ShipName	ShipAddress	ShipCity	ShipAddress
1	10248	FISA	5	1996-07-04 00:00:00.000	1996-08-01 00:00:00.000	1996-07-16 00:00:00.000	3	Vins et alcools Chevalier	59 rue de l'Abbaye	Reims	NUL
2	10249	TMSP	6	1996-07-05 00:00:00.000	1996-08-16 00:00:00.000	1996-07-10 00:00:00.000	1	Toms Spezialitäten	Luisenstr. 48	Münster	NUL
3	10250	HANAR	4	1996-07-06 00:00:00.000	1996-08-05 00:00:00.000	1996-07-12 00:00:00.000	2	Hanar Cames	Rua do Paço, 67	Rio de Janeiro	RJ
4	10251	VICTE	3	1996-07-08 00:00:00.000	1996-08-05 00:00:00.000	1996-07-15 00:00:00.000	1	Victuailles en stock	2, rue du Commerce	Lyon	NUL
5	10252	SUPRD	4	1996-07-09 00:00:00.000	1996-08-06 00:00:00.000	1996-07-11 00:00:00.000	2	Suprêmes délices	Boulevard Tirou, 255	Charleroi	NUL
6	10253	HANAR	3	1996-07-10 00:00:00.000	1996-07-24 00:00:00.000	1996-07-16 00:00:00.000	2	Hanar Cames	Rua do Paço, 67	Rio de Janeiro	RJ
7	10254	CHOPS	5	1996-07-11 00:00:00.000	1996-08-08 00:00:00.000	1996-07-23 00:00:00.000	2	Chop-suey Chinese	Hauptstr. 31	Bern	NUL
8	10255	RICSU	9	1996-07-12 00:00:00.000	1996-08-09 00:00:00.000	1996-07-15 00:00:00.000	3	Richter Supermarkt	Starenweg 5	Genève	NUL
9	10256	WELLU	3	1996-07-15 00:00:00.000	1996-08-12 00:00:00.000	1996-07-17 00:00:00.000	2	Wellington Importadora	Rua do Mercado, 12	Resende	SP
10	10257	HILAA	4	1996-07-16 00:00:00.000	1996-08-13 00:00:00.000	1996-07-22 00:00:00.000	3	HILARION-Abastos	Carretera 22 con Ave. Carlos Soublette #8-35	San Cristóbal	TAC
11	10258	ERNSH	1	1996-07-17 00:00:00.000	1996-08-14 00:00:00.000	1996-07-23 00:00:00.000	1	Ernst Handel	Kirchgasse 6	Graz	NUL

Query executed successfully.

4. Select all data from the Orders table, ordered by ShippedDate, newest date on top.

select * from Orders order by ShippedDate Desc

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a connection to 'LCS-VC-MSSQL-02.ad.syr.edu' with the database 'Northwind'. The 'Results' tab in the center displays the output of the following SQL query:

```
use Northwind
select * from Orders order by ShippedDate Desc
```

The results grid contains 830 rows of data from the Orders table, ordered by ShippedDate in descending order. The columns include OrderID, CustomerID, EmployeeID, OrderDate, RequiredDate, ShippedDate, ShipVia, Freight, ShipName, ShipAddress, and ShipCity. The data spans multiple pages, indicated by arrows at the bottom of the grid.

- Select all data from the Orders table, where order has not shipped yet (ShippedDate is null).

`select * from Orders where ShippedDate is Null`

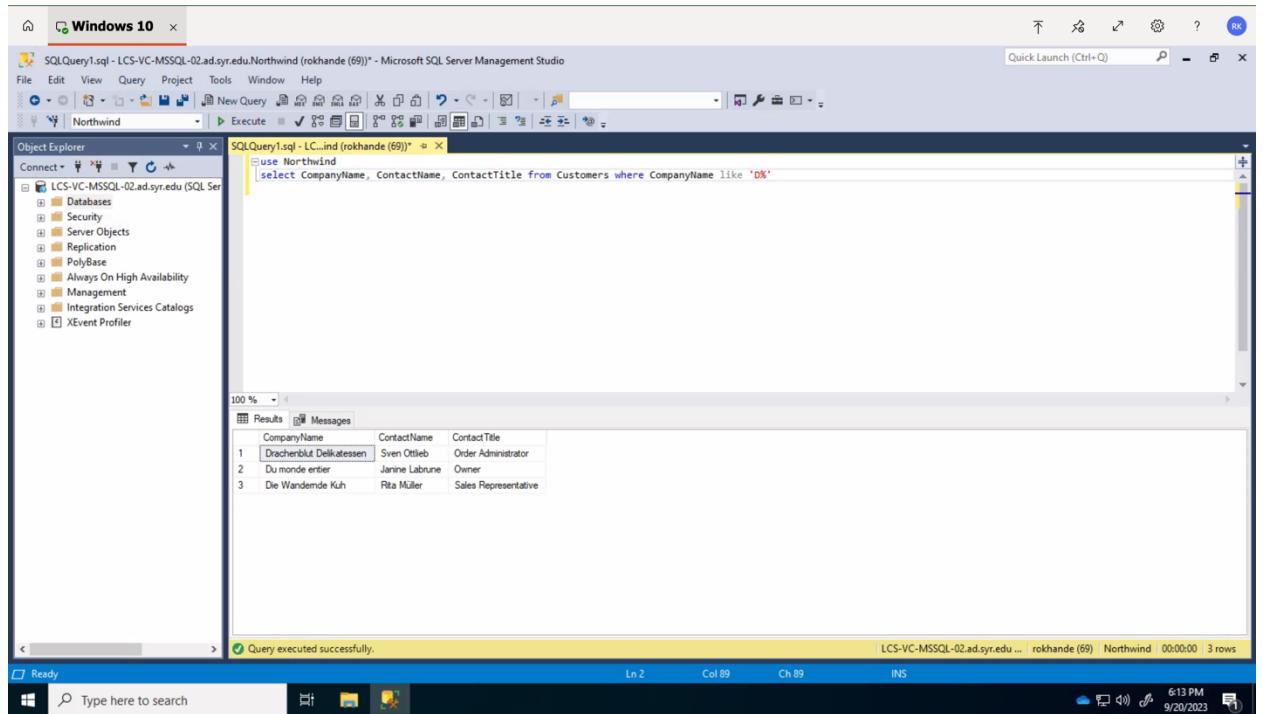
The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a connection to 'LCS-VC-MSSQL-02.ad.syr.edu' with the database 'Northwind'. The 'Results' tab in the center displays the output of the following SQL query:

```
use Northwind
select * from Orders where ShippedDate is Null
```

The results grid contains 21 rows of data from the Orders table where ShippedDate is null. The columns include OrderID, CustomerID, EmployeeID, OrderDate, RequiredDate, ShippedDate, ShipVia, Freight, ShipName, ShipAddress, ShipCity, ShipRegion, and ShipPostalCode. The data spans multiple pages, indicated by arrows at the bottom of the grid.

- Select CompanyName, ContactName and ContactTitle from the Customers table, where Company Name starts with D.

select CompanyName, ContactName, ContactTitle from Customers where CompanyName like 'D%'



The screenshot shows the Microsoft SQL Server Management Studio interface. The title bar reads "Windows 10" and "SQLQuery1.sql - LCS-VC-MSSQL-02.ad.syr.edu.Northwind (rokhande (69)) - Microsoft SQL Server Management Studio". The main window has two panes: "Object Explorer" on the left and "SQL Query Editor" on the right. The Object Explorer shows a connection to "LCS-VC-MSSQL-02.ad.syr.edu (SQL Server)" with nodes for Databases, Security, Server Objects, Replication, PolyBase, Always On High Availability, Management, Integration Services Catalogs, and XEvent Profiler. The SQL Query Editor pane contains the following SQL code:

```
use Northwind
select CompanyName, ContactName, ContactTitle from Customers where CompanyName like 'D%'
```

The results pane displays the output of the query:

CompanyName	ContactName	ContactTitle
Drachenblut Delikatessen	Sven Ottieb	Order Administrator
Du monde entier	Janine Labune	Owner
Die Wandering Kuh	Rita Müller	Sales Representative

Below the results, a message says "Query executed successfully." and the status bar indicates "Ln 2 Col 89 Ch 89 INS". The taskbar at the bottom shows the Windows Start button, a search bar with "Type here to search", and several pinned icons.

7. Select EmployeeID, FirstName, LastName and Title from the Employees table, where last name starts with E, F or G.

select EmployeeID, FirstName, LastName, Title from Employees where LastName like 'E%' or LastName like 'F%' or LastName like 'G%'

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a connection to 'LCS-VC-MSSQL-02.ad.syr.edu.Northwind'. The main window displays a query results grid for a SELECT statement:

```
use Northwind
select EmployeeID, FirstName, LastName, Title from Employees where LastName like 'E%' or LastName like 'F%' or LastName like 'G%'
```

	EmployeeID	FirstName	LastName	Title
1	2	Andrew	Fuller	Vice President, Sales

Below the grid, a message says 'Query executed successfully.' and the status bar indicates 'LCS-VC-MSSQL-02.ad.syr.edu ... rokhande (69) Northwind 00:00:00 1 rows'.

8. Select number of records from the Suppliers table.

select COUNT(*) from Suppliers

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a connection to 'LCS-VC-MSSQL-02.ad.syr.edu.Northwind'. The main window displays a query results grid for a SELECT statement:

```
use Northwind
select COUNT(*) from Suppliers
```

(No column name)
1 29

Below the grid, a message says 'Query executed successfully.' and the status bar indicates 'LCS-VC-MSSQL-02.ad.syr.edu ... rokhande (69) Northwind 00:00:00 1 rows'.

9. List all data from Orders table for orderId 10253.

select * from Orders where OrderID=10253

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a connection to 'LCS-VC-MSSQL-02.ad.syr.edu' and the 'Northwind' database. The main pane displays a query window with the following SQL code:

```
use Northwind
select * from Orders where OrderID=10253
```

The results pane shows a single row of data:

OrderID	CustomerID	EmployeeID	OrderDate	RequiredDate	ShippedDate	ShipVia	Freight	ShipName	ShipAddress	ShipCity	ShipRegion	ShipPostalCode	ShipCountry	
1	10253	HANAR	3	1996-07-10 00:00:00.000	1996-07-24 00:00:00.000	1996-07-16 00:00:00.000	2	58.17	Hanari Cames	Rua do Paço, 67	Rio de Janeiro	RJ	05454-876	Brazil

Below the results, a message indicates: 'Query executed successfully.' The status bar at the bottom right shows the date and time: '9/20/2023 6:14 PM'.

10. List all order data (Orders table) placed by Customer ID AROUT or BERGS or BLAUS

select * from Orders where CustomerID='AROUT' or CustomerID='BERGS' or CustomerID='BLAUS'

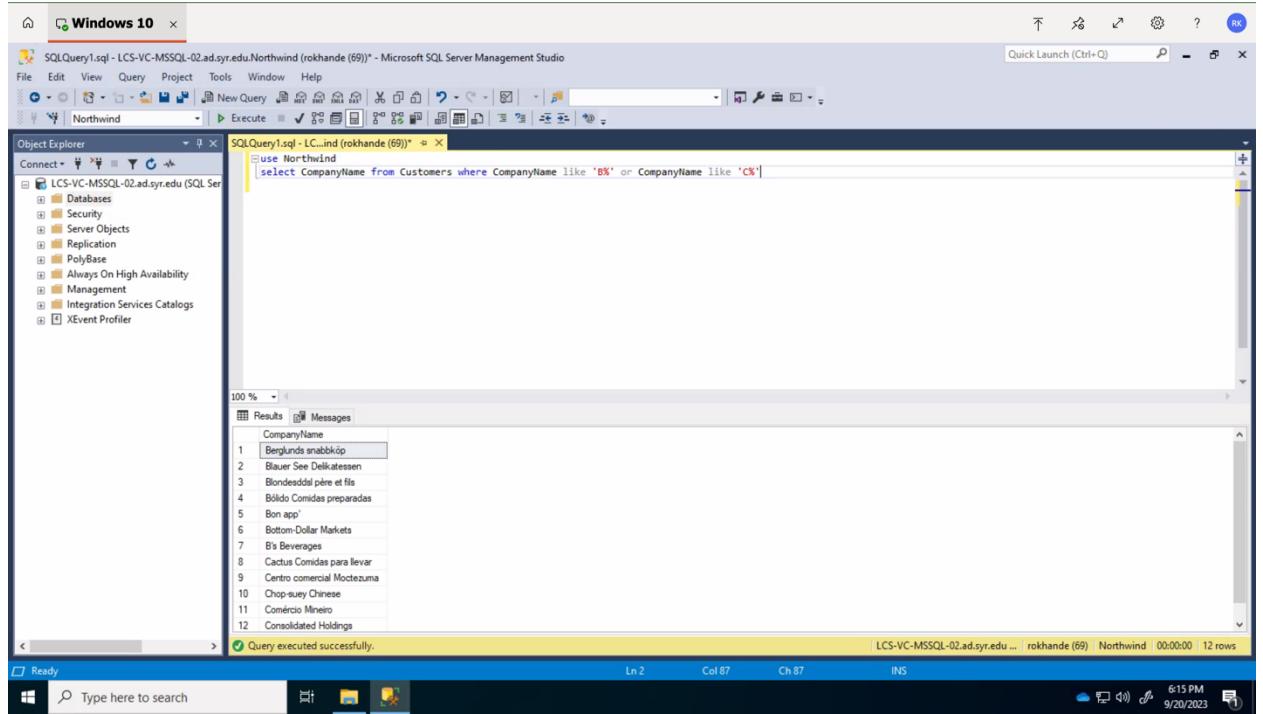
The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows a connection to 'LCS-VC-MSSQL-02.ad.syr.edu' and the 'Northwind' database. The main pane displays a query window with the following SQL code:

```
use Northwind
select * from Orders where CustomerID='AROUT' or CustomerID='BERGS' or CustomerID='BLAUS'
```

The results pane shows multiple rows of data, corresponding to the three specified customer IDs. The table structure is identical to the previous screenshot. The status bar at the bottom right shows the date and time: '9/20/2023 6:15 PM'.

11. List all company names that start with letters B or C (Customers table)

select CompanyName from Customers where CompanyName like 'B%' or CompanyName like 'C%'



The screenshot shows the Microsoft SQL Server Management Studio interface. The title bar reads "Windows 10" and "SQLQuery1.sql - LCS-VC-MSSQL-02.ad.syr.edu.Northwind (rokhande (69)) - Microsoft SQL Server Management Studio". The Object Explorer on the left shows a connection to "LCS-VC-MSSQL-02.ad.syr.edu (SQL Server)" with nodes for Databases, Security, Server Objects, Replication, PolyBase, Always On High Availability, Management, Integration Services Catalogs, and XEvent Profiler. The main pane displays a query results window titled "SQLQuery1.sql - LC...ind (rokhande (69))". The query is:

```
use Northwind
select CompanyName from Customers where CompanyName like 'B%' or CompanyName like 'C%'
```

The results grid shows 12 rows of company names:

CompanyName
Berglunds snabbköp
Blauer See Delikatessen
Blondesddé père et fils
Bólido Comidas preparadas
Ron app'
Bottom-Dollar Markets
B's Beverages
Cactus Comidas para llevar
Centro comercial Modezuma
Chop-suey Chinese
Comércio Mineiro
Consolidated Holdings

At the bottom of the results window, it says "Query executed successfully." and shows statistics: Ln 2, Col 87, Ch 87, INS.

12. List of **unique** company names that placed their order in 1996 (Customers table, Orders table).

Use YEAR(date)

```
SELECT DISTINCT C.CompanyName FROM Customers AS C INNER JOIN Orders AS O ON C.CustomerID = O.CustomerID WHERE YEAR(O.OrderDate) = 1996
```

```

SQLQuery1.sql - LCS-VC-MSSQL-02.ad.syr.edu.Northwind (rokhande (69)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect ▾ Databases Security Server Objects Replication PolyBase Always On High Availability Management Integration Services Catalogs XEvent Profiler
Northwind
SQLQuery1.sql - LC...ind (rokhande (69)) - 
use Northwind
SELECT DISTINCT C.CompanyName FROM Customers AS C INNER JOIN Orders AS O ON C.CustomerID = O.CustomerID WHERE YEAR(O.OrderDate) = 1996
Results Messages
CompanyName
1 Ana Trujillo Emparedados y helados
2 Antonio Moreno Taquería
3 Around the Horn
4 Berglunds snabbköp
5 Blödo Comidas preparadas
6 Bólido Comidas preparadas
7 Bon app'
8 Bottom-Dollar Markets
9 B's Beverages
10 Centro comercial Modezuma
11 Chop-suey Chinese
12 Comércio Mineiro
Query executed successfully.
LN 2 Col 135 Ch 135 INS
6:16 PM 9/20/2023

```

13. List out all records from Orders table for Company Name B's Beverages (Customers table)

HINT – CompanyName = 'B's Beverages' will do the trick

Select * from Orders as O INNER JOIN Customers as C ON C.CustomerID = O.CustomerID where
C.CompanyName='B's Beverages'

```

SQLQuery1.sql - LCS-VC-MSSQL-02.ad.syr.edu.Northwind (rokhande (69)) - Microsoft SQL Server Management Studio
File Edit View Query Project Tools Window Help
Object Explorer
Connect ▾ Databases Security Server Objects Replication PolyBase Always On High Availability Management Integration Services Catalogs XEvent Profiler
Northwind
SQLQuery1.sql - LC...ind (rokhande (69)) - 
Select * from Orders as O INNER JOIN Customers as C ON C.CustomerID = O.CustomerID where C.CompanyName='B's Beverages'
Results Messages
OrderID CustomerID EmployeeID OrderDate RequiredDate ShippedDate ShipVia Freight ShipName ShipAddress ShipCity ShipRegion ShipPostalCode ShipCountry
1 10289 BSBEV 7 1996-08-26 00:00:00.000 1996-09-23 00:00:00.000 1996-08-28 00:00:00.000 3 22.77 B's Beverages Faunferry Circus London NULL EC2 5NT UK E
2 10471 BSBEV 2 1997-03-11 00:00:00.000 1997-04-08 00:00:00.000 1997-03-18 00:00:00.000 3 45.59 B's Beverages Faunferry Circus London NULL EC2 5NT UK E
3 10494 BSBEV 3 1997-03-24 00:00:00.000 1997-04-21 00:00:00.000 1997-04-01 00:00:00.000 3 6.88 B's Beverages Faunferry Circus London NULL EC2 5NT UK E
4 10538 BSBEV 9 1997-05-15 00:00:00.000 1997-06-12 00:00:00.000 1997-05-16 00:00:00.000 3 4.87 B's Beverages Faunferry Circus London NULL EC2 5NT UK E
5 10539 BSBEV 6 1997-05-16 00:00:00.000 1997-06-13 00:00:00.000 1997-05-23 00:00:00.000 3 12.36 B's Beverages Faunferry Circus London NULL EC2 5NT UK E
6 10578 BSBEV 4 1997-06-24 00:00:00.000 1997-07-22 00:00:00.000 1997-07-25 00:00:00.000 3 29.60 B's Beverages Faunferry Circus London NULL EC2 5NT UK E
7 10599 BSBEV 6 1997-07-15 00:00:00.000 1997-08-26 00:00:00.000 1997-07-21 00:00:00.000 3 29.98 B's Beverages Faunferry Circus London NULL EC2 5NT UK E
8 10943 BSBEV 4 1998-03-11 00:00:00.000 1998-04-08 00:00:00.000 1998-03-19 00:00:00.000 2 2.17 B's Beverages Faunferry Circus London NULL EC2 5NT UK E
9 10947 BSBEV 3 1998-03-13 00:00:00.000 1998-04-10 00:00:00.000 1998-03-16 00:00:00.000 2 3.26 B's Beverages Faunferry Circus London NULL EC2 5NT UK E
10 11023 BSBEV 1 1998-04-14 00:00:00.000 1998-04-28 00:00:00.000 1998-04-24 00:00:00.000 2 123.83 B's Beverages Faunferry Circus London NULL EC2 5NT UK E
Query executed successfully.
LN 2 Col 120 Ch 120 INS
6:16 PM 9/20/2023

```