

**SELECT** : "This query retrieves all records from the ecommerce table to view the complete dataset."

**WHERE**: "This query filters the dataset to show only those orders where the payment method is 'money order'."

The screenshot displays the MySQL Workbench interface. The left sidebar shows the 'Schemas' tree with 'assignment' expanded, containing 'ecommerce' and 'orders' tables. The main editor shows a SQL file with the following queries:

```
31  VARCHAR(10),Product_Category VARCHAR(50),Product VARCHAR(50),Sales INT,quantity INT,Discount NUMERIC(10,2),Profit NUMERIC(10,2),Shipping_Cost Num
32  • select * from ecommerce;
33
34  #------(Basic Data Retrieval Queries)-----
35
36  #(.1) SELECT
37  • SELECT * from ecommerce;
38
39  # (.2) WHERE
40  • select * from Ecommerce WHERE Payment_Method='money_order';
```

The 'Result Grid' shows the output of the second query, displaying 15 rows of data from the 'ecommerce' table. The columns are: Order\_Date, Order\_Time, Aging, Customer\_Id, Gender, Device\_Type, Customer\_Login\_type, Product\_Category, Product, Sales, quantity, Discount, Profit, Shipping\_Cost, and a status column (C/H/M).

Order_Date	Order_Time	Aging	Customer_Id	Gender	Device_Type	Customer_Login_type	Product_Category	Product	Sales	quantity	Discount	Profit	Shipping_Cost	
2018-05-16	19:41:10	10	31839	Female	Web	Member	Auto & Accessories	Car Media Players	140	1	0.20	54.40	5.40	C
2018-08-20	23:46:53	8	42676	Female	Web	Member	Auto & Accessories	Car Mat	54	1	0.30	54.00	5.40	H
2018-11-10	11:58:33	4	19919	Female	Web	Member	Auto & Accessories	Car Body Covers	117	1	0.20	34.70	3.50	H
2018-05-19	18:53:40	6	38490	Female	Web	Member	Auto & Accessories	Car & Bike Care	118	5	0.30	14.40	1.40	C
2018-11-04	23:25:30	1	42084	Female	Web	Member	Auto & Accessories	Car Mat	54	5	0.10	10.80	1.10	H
2018-05-14	20:28:25	7	32218	Female	Web	Member	Auto & Accessories	Car Pillow & Neck Rest	231	4	0.30	114.00	11.40	H
2018-10-11	10:25:52	2	28082	Male	Web	Member	Auto & Accessories	Car Pillow & Neck Rest	231	1	0.30	132.50	13.30	H
2018-10-11	08:18:19	6	20444	Male	Web	Member	Auto & Accessories	Car Media Players	140	1	0.30	51.60	5.20	H
2018-09-22	08:48:13	8	25308	Male	Web	Member	Auto & Accessories	Car Pillow & Neck Rest	231	5	0.20	127.90	12.80	M
2018-08-10	13:26:59	4	52527	Male	Web	Member	Auto & Accessories	Car Speakers	211	1	0.30	109.90	11.00	M
2018-07-15	08:33:19	1	22734	Male	Web	Member	Auto & Accessories	Tyre	250	1	0.10	167.50	16.80	H

**ORDER BY CLAUSE:** Tis query sorts all orders in the ecommerce table by Order date in ascending order.

MySQL Workbench

local host x

File Edit View Query Database Server Tools Scripting Help

Navigator

SQL File 4\* myNEWsqlfile x ecommerce practice assignment.e-commerce dataset assignment.e-commerce dataset assignment.e-commerce dataset

Limit to 500 rows

```
34 #------(Basic Data Retrieval Queries)-----
35
36 #(.1) SELECT
37 • SELECT * from ecommerce;
38
39 # (.2) WHERE
40 • select * from Ecommerce WHERE Payment_Method='money_order';
41
42 # (.3) ORDER BY
43 • select * from Ecommerce ORDER BY Order_Date;
```

Result Grid

	Order_Date	Order_Time	Aging	Customer_Id	Gender	Device_Type	Customer_Login_type	Product_Category	Product	Sales	quantity	Discount	Profit	Shipping_Cost	Order_
▶	2018-01-01	16:26:43	4	64013	Male	Web	Member	Home & Furniture	Shoe Rack	124	5	0.30	13.00	1.30	Medium
	2018-01-01	08:20:11	7	98666	Male	Web	Member	Home & Furniture	Umbrellas	70	5	0.30	14.00	1.40	Medium
	2018-01-01	22:22:13	9	92644	Male	Web	Member	Home & Furniture	Beds	78	3	0.30	26.00	2.60	Medium
	2018-01-01	11:10:48	9	90539	Male	Web	Member	Home & Furniture	Shoe Rack	124	3	0.40	29.10	2.90	Medium
	2018-01-01	13:49:51	9	62725	Male	Web	Member	Home & Furniture	Towels	228	1	0.40	138.90	13.90	Medium
	2018-01-01	14:18:30	4	63793	Male	Web	Member	Home & Furniture	Bed Sheets	211	1	0.30	118.30	11.80	Medium
	2018-01-01	12:53:03	8	82737	Female	Web	Member	Fashion	Formal Shoes	213	1	0.30	126.60	12.70	Medium
	2018-01-01	19:27:14	3	70146	Female	Web	Member	Home & Furniture	Dinning Tables	119	1	0.10	37.80	3.80	Low
	2018-01-01	20:49:32	1	80361	Female	Web	Member	Home & Furniture	Towels	228	3	0.30	127.50	12.70	Medium
	2018-01-01	10:55:25	8	92789	Female	Web	Member	Home & Furniture	Shoe Rack	124	2	0.30	29.10	2.90	Medium
	2018-01-01	07:50:32	5	88072	Female	Web	Member	Home & Furniture	Towels	228	2	0.40	129.80	13.00	High

Ecommerce 50 x

Output

Action Output

Object Info Session

Table: orders

Columns:

Order\_ID PK  
Order\_Date date  
Time time  
Customer\_Id int  
Product\_Category varchar  
Product varchar  
Sales float  
Quantity int  
Discount float  
Profit float  
Shipping\_Cost float  
Order\_Priority varchar  
Payment\_method varchar

Result Grid  
Form Editor  
Field Types

Read Only

Duration / Fetch

Type here to search

Desktop 41°C

ENG IN

5:32 PM

5/29/2025

**GROUP BY CLAUSE:** This query groups the data by gender and shows the total quantity purchased by each gender.

The screenshot displays the MySQL Workbench interface. The 'Schemas' pane on the left shows the database structure, including the 'assignment' database with tables 'ecommerce' and 'orders'. The main editor window shows a SQL query file named 'myNEWsqlfile' with the following code:

```
37 • SELECT * from ecommerce;
38
39 # (.2) WHERE
40 • select * from Ecommerce WHERE Payment_Method='money_order';
41
42 # (.3) ORDER BY
43 • select * from Ecommerce ORDER BY Order_Date;
44
45 # (.4) GROUP BY
46 • select Gender,sum(Quantity) as total_quantity from ecommerce group by Gender;
```

Below the query editor, the 'Result Grid' tab is active, displaying the results of the query in a table:

Gender	total_quantity
Female	58740
Male	69238

The bottom of the interface shows the 'Output' pane with 'Action Output' selected, and the system tray at the very bottom displays the date and time as 5:32 PM on 5/29/2025.

**AGGREGATE FUNCTIONS(SUM):** This query calculates the total quantity of products sold.

MySQL Workbench

local host x

File Edit View Query Database Server Tools Scripting Help

Navigator: Schemas

Filter objects

assignment

- Tables
  - ecommerce
  - orders
- Views
- Stored Procedures
- Functions

practice sakila sys windows

Administration Schemas

Information

Table: orders

Columns:

Order_ID	varchar
Order_Date	date
Time	time
Customer_Id	int
Product_Category	varchar
Product	varchar
Sales	float
Quantity	int
Discount	float
Profit	float
Shipping_Cost	float
Order_Priority	varchar
Payment_method	varchar

Object Info Session

SQL File 4\* myNEWsqlfile x ecommerce practice assignment.e-commerce dataset assignment.e-commerce dataset assignment.e-commerce dataset

Limit to 500 rows

```
42 # (.3) ORDER BY
43 • select * from Ecommerce ORDER BY Order_Date;
44
45 # (.4) GROUP BY
46 • select Gender, sum(Quantity) as total_quantity from ecommerce group by Gender;
47
48 #----- ( Aggregate Function Queries) -----
49
50 #(.1) SUM
51 • select SUM(Quantity) as Total_Quantity from Ecommerce;
```

Result Grid

Total_Quantity
127978

Filter Rows: Export: Wrap Cell Content: Read Only

Result 52 x

Output

Action Output

Message

Duration / Fetch

Windows Taskbar: 5:33 PM 5/29/2025

**AGGREGATE FUNCTIONS(COUNT):** This query counts the total number of customer IDs in the dataset.

The screenshot displays the MySQL Workbench interface. The left sidebar shows the 'SCHEMAS' tree with 'assignment' selected, containing 'ecommerce' and 'orders' tables. The main editor shows a SQL query file with the following content:

```
45 # (.4) GROUP BY
46 • select * from ecommerce group by Gender;
47
48 #----- ( Aggregate Function Queries)-----
49
50 #(.1) SUM
51 • select SUM(Quantity) as Total_Quantity from Ecommerce;
52
53 #(.2) COUNT
54 • select COUNT(Customer_id) as Count_id from Ecommerce;
```

The 'Result Grid' at the bottom shows the output of the last query (Result 53):

Count_id
51111

The bottom status bar shows the 'Object Info' tab for the 'orders' table, listing columns and their data types.

# AGGREGATE FUNCTIONS(AVG): This query calculates the average sales amount across all orders

The screenshot displays the MySQL Workbench interface. The left sidebar shows the 'SCHEMAS' panel with a tree view of databases including 'assignment', 'practice', 'sakila', 'sys', and 'windows'. The 'assignment' database is selected, showing its tables: 'ecommerce' and 'orders'. The 'orders' table is highlighted, and its structure is shown in the 'Table: orders' panel below. The structure lists columns: Order\_ID (PK), Order\_Date, Time, Customer\_Id, Product\_Category, Product, Sales, Quantity, Discount, Profit, Shipping\_Cost, Order\_Priority, and Payment\_method.

The main editor window shows a SQL file named 'myNEWsqlfile' with the following queries:

```
-- (Aggregate Function Queries)-----
-- Execute the statement under the keyboard cursor
#(.1) SUM
51 • select SUM(Quantity) as Total_Quantity from Ecommerce;
52
#(.2) COUNT
54 • select COUNT(Customer_id) as Count_id from Ecommerce;
55
#(.3) AVG
57 • select AVG(Sales) as Average_sales from Ecommerce;
```

The 'Result Grid' panel shows the output of the last query (Result 54):

Average_sales
152.3527

The bottom status bar shows the 'Output' panel with 'Action Output' selected. The system tray at the bottom indicates the date and time as 5:33 PM on 5/29/2025.



**AGGREGATE FUNCTIONS(MIN):** This query finds the minimum profit value from all transactions.

The screenshot displays the MySQL Workbench interface. The left sidebar shows the 'SCHEMAS' tree with the 'assignment' database selected, containing tables 'ecommerce' and 'orders'. The main editor window shows a SQL query file with the following code:

```
51 • select SUM(Quantity) as Total_Quantity from Ecommerce;
52
53 • #(.2) COUNT
54 • select COUNT(Customer_id) as Count_id from Ecommerce;
55
56 • #(.3) AVG
57 • select AVG(Sales) as Average_sales from Ecommerce;
58
59 • #(.4) MIN
60 • select MIN(Profit) as Min_Profit from Ecommerce;
```

A tooltip 'Execute the statement under the keyboard cursor' is visible over the second query. Below the editor, the 'Result Grid' shows the output of the selected query (line 60):

Min_Profit
0.50

The bottom left pane shows the 'Table: orders' structure with columns: Order\_ID (PK), Order\_Date, Time, Customer\_Id, Product\_Category, Product, Sales, Quantity, Discount, Profit, Shipping\_Cost, Order\_Priority, and Payment\_method. The bottom right pane shows the 'Output' section with 'Action Output' selected.

**AGGREGATE FUNCTIONS(MAX):** "This query finds the maximum profit value from all transactions."

The screenshot displays the MySQL Workbench interface. The 'Schemas' pane on the left shows the 'assignment' database selected, with the 'orders' table highlighted. The main editor window contains a SQL script with several queries. The query at line 63, `select MAX(Profit) as Max_Profit from Ecommerce;`, is highlighted. A tooltip above it says 'Execute the statement under the keyboard cursor'. Below the editor, the 'Result Grid' shows the output of the selected query:

Max_Profit
167.50

The bottom of the interface shows the 'Object Info' pane with details for the 'orders' table, including columns like Order\_ID, Order\_Date, Customer\_Id, and Profit. The Windows taskbar at the very bottom shows the system clock as 5:33 PM on 5/29/2025.



**SUB-QUERY:** This query identifies customers whose total sales are higher than the average sales across all customers using a subquery

The screenshot shows the MySQL Workbench interface. The left sidebar contains the 'Navigator' pane with a 'SCHEMAS' section. Under 'assignment', there are 'Tables' (ecommerce, orders) and 'Views'. The 'Information' pane shows 'No object selected'. The main editor displays a SQL query with a subquery. The query is as follows:

```
84  
85  
86 # ----- (SUB-QUERIES) -----  
87  
88 • SELECT Customer_Id  
89 FROM Orders  
90 GROUP BY Customer_Id  
91 HAVING SUM(Sales) > (  
92     SELECT AVG(Sales)  
93     FROM Orders  
94 );  
95
```

The 'Result Grid' pane shows the results of the query, which is a list of Customer\_Id values. The 'Output' pane shows the 'Action Output'.

Customer_Id
59173
53639
39783
46947
22249
18622
56296
51112
50043

**INNER JOIN:** This query combines data from ecommerce and Orders tables where customer IDs match in both tables."

MySQL Workbench

local host x

File Edit View Query Database Server Tools Scripting Help

Navigator

SQL File 4\* myNEWsqlfile x ecommerce practice assignment.e-commerce dataset assignment.e-commerce dataset assignment.e-commerce dataset

Limit to 500 rows

```
90 GROUP BY Customer_Id
91 HAVING
92 SELECT AVG(Sales)
93 FROM Orders
94 );
95
96
97 #----- (INNER JOIN) -----
98
99 select * from ecommerce as e join Orders as O on e.customer_id=O.customer_id;
```

Result Grid

	Order_Date	Order_Time	Aging	Customer_Id	Gender	Device_Type	Customer_Login_type	Product_Category	Product	Sales	quantity	Discount	Profit	Shipping_Cost	
▶	2018-01-02	10:56:33	8	37077	Female	Web	Member	Auto & Accessories	Car Media Players	140	1	0.30	46.00	4.60	M
	2018-07-24	20:41:37	2	59173	Female	Web	Member	Auto & Accessories	Car Speakers	211	1	0.30	112.00	11.20	M
	2018-11-08	08:38:49	8	41066	Female	Web	Member	Auto & Accessories	Car Body Covers	117	5	0.10	31.20	3.10	C
	2018-04-18	19:28:06	7	50741	Female	Web	Member	Auto & Accessories	Car & Bike Care	118	1	0.30	26.20	2.60	H
	2018-08-13	21:18:39	9	53639	Female	Web	Member	Auto & Accessories	Tyre	250	1	0.30	160.00	16.00	C
	2018-07-09	21:57:05	8	39783	Female	Web	Member	Auto & Accessories	Bike Tyres	72	1	0.30	24.00	2.40	C
	2018-11-14	17:13:56	3	39783	Female	Web	Member	Fashion	Jeans	218	1	0.30	131.50	13.10	M
	2018-05-16	13:10:30	1	26767	Female	Web	Member	Auto & Accessories	Car Mat	54	1	0.30	54.00	5.40	H
	2018-06-23	18:29:09	7	20719	Female	Web	Member	Auto & Accessories	Car Seat Covers	114	5	0.20	22.60	2.30	C
	2018-07-29	11:55:02	7	46947	Female	Web	Member	Auto & Accessories	Car Pillow & Neck Rest	231	5	0.30	116.40	11.60	C
	2018-05-16	19:41:10	10	31839	Female	Web	Member	Auto & Accessories	Car Media Players	140	1	0.20	54.40	5.40	C

Table: orders

Columns:

- Order\_ID
- Order\_Date
- Time
- Customer\_Id
- Product\_Category
- Product
- Sales
- Quantity
- Discount
- Profit
- Shipping\_Cost
- Order\_Priority
- Payment method

Object Info Session

Message

Duration / Fetch

**LEFT JOIN:** This query retrieves all records from the ecommerce table and the matched records from the Orders table.

MySQL Workbench

local host x

File Edit View Query Database Server Tools Scripting Help

Navigator: myNEWsqlfile x ecommerce practice assignment.e-commerce dataset assignment.e-commerce dataset assignment.e-commerce dataset

SCHEMAS

Filter objects

assignment

Tables

ecommerce

orders

Views

Stored Procedures

Functions

practice

sakila

sys

windows

Administration Schemas

Information

Table: orders

Columns:

Order\_ID

Order\_Date

Time

Customer\_Id

Product\_Category

Product

Sales

Quantity

Discount

Profit

Shipping\_Cost

Order\_Priority

Payment method

varchar PK

date

time

int

varchar

float

int

float

float

varchar

varchar

SQL File 4\* myNEWsqlfile x ecommerce practice assignment.e-commerce dataset assignment.e-commerce dataset assignment.e-commerce dataset

Limit to 500 rows

96

97 #----- Execute the statement under the keyboard cursor -----

98

99 • select \* from ecommerce as e join Orders as O on e.customer\_id=O.customer\_id;

100

101

102 #----- (LEFT JOIN) -----

103

104 • select \* from ecommerce as e left join Orders as O on e.customer\_id=O.customer\_id;

105

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

Fetch rows:

Order_Date	Order_Time	Aging	Customer_Id	Gender	Device_Type	Customer_Login_type	Product_Category	Product	Sales	quantity	Discount	Profit	Shipping_Cost	
2018-01-02	10:56:33	8	37077	Female	Web	Member	Auto & Accessories	Car Media Players	140	1	0.30	46.00	4.60	M
2018-07-24	20:41:37	2	59173	Female	Web	Member	Auto & Accessories	Car Speakers	211	1	0.30	112.00	11.20	M
2018-11-08	08:38:49	8	41066	Female	Web	Member	Auto & Accessories	Car Body Covers	117	5	0.10	31.20	3.10	C
2018-04-18	19:28:06	7	50741	Female	Web	Member	Auto & Accessories	Car & Bike Care	118	1	0.30	26.20	2.60	H
2018-08-13	21:18:39	9	53639	Female	Web	Member	Auto & Accessories	Tyre	250	1	0.30	160.00	16.00	C
2018-07-09	21:57:05	8	39783	Female	Web	Member	Auto & Accessories	Bike Tyres	72	1	0.30	24.00	2.40	C
2018-05-16	13:10:30	1	26767	Female	Web	Member	Auto & Accessories	Car Mat	54	1	0.30	54.00	5.40	H
2018-06-23	18:29:09	7	20719	Female	Web	Member	Auto & Accessories	Car Seat Covers	114	5	0.20	22.60	2.30	C
2018-07-29	11:55:02	7	46947	Female	Web	Member	Auto & Accessories	Car Pillow & Neck Rest	231	5	0.30	116.40	11.60	C
2018-05-16	19:41:10	10	31839	Female	Web	Member	Auto & Accessories	Car Media Players	140	1	0.20	54.40	5.40	C
2018-07-13	19:58:11	10	22249	Female	Web	Member	Auto & Accessories	Car Speakers	211	4	0.10	122.60	12.30	C

Result 58 x

Output

Action Output

# Time Action Message Duration / Fetch

Read Only

**RIGHT JOIN:** This query retrieves all records from the Orders table and the matched records from the ecommerce table.

The screenshot displays the MySQL Workbench interface. The 'Schemas' pane on the left shows the 'assignment' database with tables 'ecommerce' and 'orders'. The 'SQL File 4\*' editor shows two queries. The first query is a LEFT JOIN, and the second is a RIGHT JOIN. The 'Result Grid' shows the results of the RIGHT JOIN query, displaying 15 columns: Order\_Date, Order\_Time, Aging, Customer\_Id, Gender, Device\_Type, Customer\_Login\_type, Product\_Category, Product, Sales, quantity, Discount, Profit, Shipping\_Cost, and a column for the join type (M, C, H). The results show 15 rows of data, including details like Order\_Date, Order\_Time, Aging, Customer\_Id, Gender, Device\_Type, Customer\_Login\_type, Product\_Category, Product, Sales, quantity, Discount, Profit, and Shipping\_Cost.

```
100
101
102 #------(LEFT JOIN)-----
103
104 • select * from ecommerce as e left join Orders as O on e.customer_id=O.customer_id;
105
106 #------(RIGHT JOIN)-----
107
108
109 • select * from ecommerce as e right join Orders as O on e.customer_id=O.customer_id;
```

Order_Date	Order_Time	Aging	Customer_Id	Gender	Device_Type	Customer_Login_type	Product_Category	Product	Sales	quantity	Discount	Profit	Shipping_Cost	
2018-01-02	10:56:33	8	37077	Female	Web	Member	Auto & Accessories	Car Media Players	140	1	0.30	46.00	4.60	M
2018-07-24	20:41:37	2	59173	Female	Web	Member	Auto & Accessories	Car Speakers	211	1	0.30	112.00	11.20	M
2018-11-08	08:38:49	8	41066	Female	Web	Member	Auto & Accessories	Car Body Covers	117	5	0.10	31.20	3.10	C
2018-04-18	19:28:06	7	50741	Female	Web	Member	Auto & Accessories	Car & Bike Care	118	1	0.30	26.20	2.60	H
2018-08-13	21:18:39	9	53639	Female	Web	Member	Auto & Accessories	Tyre	250	1	0.30	160.00	16.00	C
2018-07-09	21:57:05	8	39783	Female	Web	Member	Auto & Accessories	Bike Tyres	72	1	0.30	24.00	2.40	C
2018-11-14	17:13:56	3	39783	Female	Web	Member	Fashion	Jeans	218	1	0.30	131.50	13.10	M
2018-05-16	13:10:30	1	26767	Female	Web	Member	Auto & Accessories	Car Mat	54	1	0.30	54.00	5.40	H
2018-06-23	18:29:09	7	20719	Female	Web	Member	Auto & Accessories	Car Seat Covers	114	5	0.20	22.60	2.30	C
2018-07-29	11:55:02	7	46947	Female	Web	Member	Auto & Accessories	Car Pillow & Neck Rest	231	5	0.30	116.40	11.60	C
2018-05-16	19:41:10	10	31839	Female	Web	Member	Auto & Accessories	Car Media Players	140	1	0.20	54.40	5.40	C

**VIEWS:** This view summarizes total sales for each product category in the ecommerce table.

The screenshot displays the MySQL Workbench interface. On the left, the 'SCHEMAS' pane shows a tree view with databases like 'assignment', 'practice', 'sakila', 'sys', and 'windows'. Under 'assignment', the 'ecommerce' database is selected, showing tables 'ecommerce' and 'orders', and views 'Product\_Summary' and 'Product\_Summary\_60'. The 'Table: orders' is expanded, showing columns like 'Order\_ID', 'Order\_Date', 'Customer\_Id', 'Product\_Category', 'Product', 'Sales', 'Quantity', 'Discount', 'Profit', 'Shipping\_Cost', 'Order\_Priority', and 'Payment\_method'.

The main editor window shows a SQL script with the following lines:

```
109 • select * from ecommerce as e right join Orders as O on e.customer_id=O.customer_id;
110
111
112
113 #------(Create Views)-----
114 • CREATE VIEW Product_Summary AS
115 SELECT Product_Category, SUM(Sales) AS Total_Sales
116 FROM ecommerce
117 GROUP BY Product_Category;
118 • select * from Product_Summary;
```

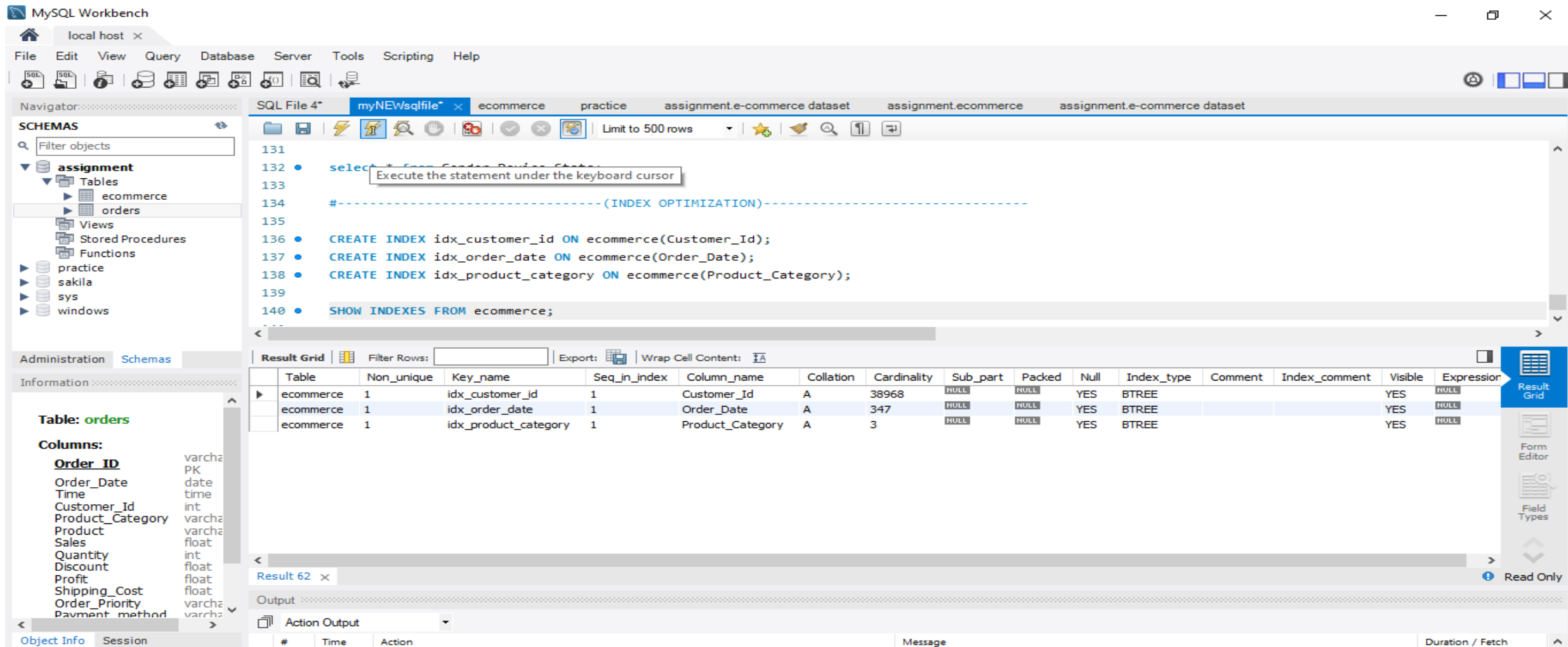
A tooltip 'Execute the statement under the keyboard cursor' is visible over the SQL script. Below the script, the 'Result Grid' shows the output of the query:

Product_Category	Total_Sales
Auto & Accessories	1092626
Electronic	385938
Fashion	4336046
Home & Furniture	1972288

The bottom of the interface shows the 'Output' pane with 'Action Output' selected, and a taskbar at the very bottom with various system icons and the time '5:35 PM 5/29/2025'.



**INDEXES:** This part of the script creates indexes on frequently used columns (Customer\_Id, Order\_Date, and Product\_Category) to improve query performance.



The screenshot displays the MySQL Workbench interface. The left sidebar shows the 'SCHEMAS' panel with a tree view of databases: assignment, ecommerce, practice, sakila, sys, and windows. The 'assignment' database is selected, showing its tables (ecommerce, orders), views, stored procedures, and functions. The 'ecommerce' table is highlighted, and its columns are listed: Order\_ID (PK), Order\_Date, Time, Customer\_Id, Product\_Category, Product, Sales, Quantity, Discount, Profit, Shipping\_Cost, Order\_Priority, and Payment\_method.

The main editor window shows a SQL script with the following queries:

```
131
132 • select * from Customer_Address;
133
134 #------(INDEX OPTIMIZATION)-----
135
136 • CREATE INDEX idx_customer_id ON ecommerce(Customer_Id);
137 • CREATE INDEX idx_order_date ON ecommerce(Order_Date);
138 • CREATE INDEX idx_product_category ON ecommerce(Product_Category);
139
140 • SHOW INDEXES FROM ecommerce;
```

A tooltip 'Execute the statement under the keyboard cursor' is visible over the first query. Below the script, the 'Result Grid' is displayed, showing the output of the 'SHOW INDEXES FROM ecommerce;' query:

Table	Non_unique	Key_name	Seq_in_index	Column_name	Collation	Cardinality	Sub_part	Packed	Null	Index_type	Comment	Index_comment	Visible	Expression
ecommerce	1	idx_customer_id	1	Customer_Id	A	38968	NULL	NULL	YES	BTREE			YES	NULL
ecommerce	1	idx_order_date	1	Order_Date	A	347	NULL	NULL	YES	BTREE			YES	NULL
ecommerce	1	idx_product_category	1	Product_Category	A	3	NULL	NULL	YES	BTREE			YES	NULL

The bottom of the interface shows the 'Output' panel with 'Action Output' selected, and a 'Message' panel at the very bottom.