

DBMS Assignment-7

Create the following tables:

Seller (Seller Id, Seller Name, Rating)

Category (Category Id, Category)

Product (Product Id, Product, amount, Quantity remaining, Category Id, seller id, Rating)

Customer (Customer Id, name, password)

Orders (Order id, customer id, amount,date, time)

Order_Products (Order id, Product id, quantity, seller id, Original amount, discount, product

Rating)

Master tables: seller, category, product and customer

Transaction tables: Order, Order_Products

Creating Tables and Inserting Values:-

```
create table Seller(
```

```
Sellerid varchar(5) PRIMARY KEY NOT NULL,
```

```
Sellername varchar(20),
```

```
Rating float
```

```
);
```

```
create table Category(
```

```
Categoryid varchar(5) PRIMARY KEY NOT NULL,
```

```
Category varchar(20)
```

```
);
```

```
create table Product(
```

```
Productid varchar(5) NOT NULL,
```

```
Product varchar(20),  
Amount int,  
QuantityRemaining int,  
Categoryid varchar(5),  
Sellerid varchar(5),  
Rating float DEFAULT 0,  
PRIMARY KEY(Productid),  
FOREIGN KEY(Categoryid) REFERENCES Category(Categoryid) ON DELETE CASCADE,  
FOREIGN KEY(Sellerid) REFERENCES Seller(Sellerid) ON DELETE CASCADE  
);
```

```
create table Customer(  
Customerid varchar(5) PRIMARY KEY NOT NULL,  
Customername varchar(20),  
Password varchar(20)  
);
```

```
create table Orders(  
Orderid varchar(5) PRIMARY KEY NOT NULL,  
Customerid varchar(5),  
Amountorder int,  
Orderdate DATE,  
Ordertime TIME,  
FOREIGN KEY(Customerid) REFERENCES Customer(Customerid) ON DELETE  
CASCADE  
);
```

```
create table Order_Products(  
Orderid varchar(5),  
Productid varchar(5),  
Sellerid varchar(5),  
Rating float,  
Quantity int,  
OriginalAmount int,  
Discount float,  
FOREIGN KEY(Orderid) REFERENCES Orders(Orderid) ON DELETE CASCADE,  
FOREIGN KEY(Productid) REFERENCES Product(Productid) ON DELETE CASCADE,  
FOREIGN KEY(Sellerid) REFERENCES Seller(Sellerid) ON DELETE CASCADE  
);
```

```
INSERT INTO Seller VALUES ('1S', 'Abhay',3.3);  
INSERT INTO Seller VALUES ('2S', 'Priya',1);  
INSERT INTO Seller VALUES ('3S', 'Kishan',4.8);  
INSERT INTO Seller VALUES ('4S', 'Vicky',4.3);  
INSERT INTO Seller VALUES ('5S', 'Sneha',3.6);  
INSERT INTO Seller VALUES ('6S', 'Pushpa',2.8);
```

```
INSERT INTO Category VALUES ('1C', 'Books');  
INSERT INTO Category VALUES ('2C', 'Footwear');  
INSERT INTO Category VALUES ('3C', 'Home Decor');  
INSERT INTO Category VALUES ('4C', 'Accessories');
```

```
INSERT INTO Product
(Productid,Product,Amount,QuantityRemaining,Categoryid,Sellerid) VALUES ('1P',
'The Programming language of Oracle',350,4,'1C','1S');
```

```
INSERT INTO
Product(Productid,Product,Amount,QuantityRemaining,Categoryid,Sellerid)
VALUES ('2P', 'Nike White
shoes',7000,2,'2C','3S');
```

```
INSERT INTO
Product(Productid,Product,Amount,QuantityRemaining,Categoryid,Sellerid)
VALUES ('3P', 'White Lamp',800,3,'3C','5S');
```

```
INSERT INTO
Product(Productid,Product,Amount,QuantityRemaining,Categoryid,Sellerid)
VALUES ('4P', 'Antique Silver
Earrings',400,7,'4C','2S');
```

```
INSERT INTO
Product(Productid,Product,Amount,QuantityRemaining,Categoryid,Sellerid)
VALUES ('5P', 'Antique Silver
Bracelet',700,5,'4C','6S');
```

```
INSERT INTO
Product(Productid,Product,Amount,QuantityRemaining,Categoryid,Sellerid)
VALUES ('6P', 'Catwalk
leather flats',1599,3,'2C','4S');
```

```
INSERT INTO Product
(Productid,Product,Amount,QuantityRemaining,Categoryid,Sellerid) VALUES ('7P',
'Introduction to
Java',650,8,'1C','5S');
```

```
INSERT INTO Product
(Productid,Product,Amount,QuantityRemaining,Categoryid,Sellerid) VALUES ('8P',
'Portico King
size bedsheet',1999,1,'3C','1S');
```

```
INSERT INTO Product
(Productid,Product,Amount,QuantityRemaining,Categoryid,Sellerid) VALUES ('9P',
'Book rack',999,7,'3C','4S');
```

```
INSERT INTO Product
(Productid,Product,Amount,QuantityRemaining,Categoryid,Sellerid) VALUES ('10P',
'Artificial
Intelligence, 3rd Edition',570,9,'1C','2S');
```

```
INSERT INTO Product
(Productid,Product,Amount,QuantityRemaining,Categoryid,Sellerid) VALUES ('11P',
'Introduction to
python',630,10,'1C','5S');
```

```
INSERT INTO Customer VALUES('1CU','Jack','drake12');
```

```
INSERT INTO Customer VALUES('2CU','Max','rock24');
```

```
INSERT INTO Customer VALUES('3CU','Ram','roll5t');
```

```
INSERT INTO Customer VALUES('4CU','Shyam','coole4');
```

```
INSERT INTO Customer VALUES('5CU','Prem','good4me');
```

```
INSERT INTO Customer VALUES ('6CU', 'Rodrick','xyz123#');
```

```
INSERT INTO Customer VALUES ('7CU', 'Anita','rod1ty');
```

```
INSERT INTO Customer VALUES ('8CU', 'Bhavi','Ani4u');
```

```
INSERT INTO Customer VALUES ('9CU', 'Guru','Gurugod');
```

```
INSERT INTO Customer VALUES ('10CU', 'Tomar','PansinghTomar4u');
```

```
INSERT INTO Orders values('1O' , '1CU' , 350 , '2021-03-12' , '04:20:09');
```

```
INSERT INTO Orders values('2O' , '1CU' , 350 , '2021-02-13' , '12:30:56');
```

```
INSERT INTO Orders values('3O' , '2CU' , 800 , '2020-11-10' , '17:22:09');
```

```
INSERT INTO Orders values('4O' , '2CU' , 400 , '2020-10-26' , '16:56:56');
```

```
INSERT INTO Orders values('5O' , '3CU' , 400 , '2020-03-03' , '22:22:22');
```

```

INSERT INTO Orders values('6O' , '3CU' , 400 , '2021-03-03' , '23:59:59');
INSERT INTO Orders values('7O' , '5CU' , 1599 , '2021-01-01' , '08:41:02');
INSERT INTO Orders values('8O' , '6CU' , 650 , '2020-05-09' , '01:12:12');
INSERT INTO Orders values('9O' , '7CU' , 1999 , '2020-08-09' , '00:08:08');
INSERT INTO Orders values('10O' , '8CU' , 999 , '2020-01-01' , '01:01:01');
INSERT INTO Orders values('11O' , '9CU' , 999 , '2021-01-30' , '20:12:50');
INSERT INTO Orders values('12O' , '10CU' , 610 , '2021-02-23' , '15:34:32');
INSERT INTO Orders values('13O' , '4CU' , 620 , '2021-02-23' , '15:34:32');

```

```

INSERT INTO order_products values('1O' , '1P' , '1S',4, 1 , 350 , 0 );
INSERT INTO order_products values('2O' , '1P' , '1S' ,5, 1 , 350 , 0 );
INSERT INTO order_products values('3O' , '3P' , '5S' , 4,1 , 800 , 0 );
INSERT INTO order_products values('4O' , '4P' , '3S' ,3, 1 , 400 , 0 );
INSERT INTO order_products values('5O' , '4P' , '2S' ,2,1 , 400 , 0 );
INSERT INTO order_products values('6O' , '6P' , '4S' ,1,1 , 1599 , 0 );
INSERT INTO order_products values('7O' , '7P' , '5S' ,3,1 , 650 , 0 );
INSERT INTO order_products values('8O' , '8P' , '1S' ,5,1 , 1999 , 0 );
INSERT INTO order_products values('9O' , '9P' , '4S' ,1,1 , 999 , 0 );
INSERT INTO order_products values('10O' , '9P' , '4S' , 4, 1 , 999 , 0 );
INSERT INTO order_products values('11O' , '11P' , '5S' ,2, 1 , 630 , 0 );
INSERT INTO order_products values('12O' , '11P' , '5S' ,1, 1 , 630 , 0 );
INSERT INTO order_products values('13O' , '11P' , '5S' ,3, 1 , 620 , 0 );

```

1. Display the highest sold product details.

```

SELECT * FROM product WHERE Productid = (SELECT Productid FROM (SELECT
MAX(count) as max, Productid FROM (SELECT Productid, COUNT(*) as count FROM
order_products GROUP BY Productid)a)a);

```

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- mysql
- performance_schema
- phpmyadmin
- test

Show query box

Showing rows 0 - 0 (1 total, Query took 0.0013 seconds.)

```
SELECT * FROM product WHERE Productid = (SELECT Productid FROM (SELECT MAX(count_) as max_, Productid FROM (SELECT Productid,COUNT(*) as count_ FROM order_products GROUP BY Productid)a))
```

☐ Profiling [\[Edit inline\]](#) [\[Edit\]](#) [\[Explain SQL\]](#) [\[Create PHP code\]](#) [\[Refresh\]](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table

+ Options

Productid	Product	Amount	QuantityRemaining	Categoryid	Sellerid	Rating
11P	Introduction to pyt	630	10	1C	5S	0

☐ Check all | With selected: [Edit](#) [Copy](#) [Delete](#) [Export](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table

Query results operations

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As 11P was sold 3 times it gets displayed.

2. Update product rating column in product table as per the entries in order_product table (calculate average).

UPDATE product p SET p.Rating = (SELECT AVG(Rating) FROM order_products GROUP BY Productid HAVING Productid = p.Productid);

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

Productid	Product	Amount	QuantityRemaining	Categoryid	Sellerid	Rating
10P	Artificial Intellig	570	9	1C	2S	NULL
11P	Introduction to pyt	630	10	1C	5S	2
1P	The Programming lang	350	4	1C	1S	4.5
2P	Nike White shoes	7000	2	2C	3S	NULL
3P	White Lamp	800	3	3C	5S	4
4P	Antique Silver Earr	400	7	4C	2S	2.5
5P	Antique Silver Brac	700	5	4C	6S	NULL
6P	Catwalk leather fla	1599	3	2C	4S	1
7P	Introduction to Jav	650	8	1C	5S	3
8P	Portico King size b	1999	1	3C	1S	5
9P	Book rack	999	7	3C	4S	2.5

☐ Check all | With selected: [Edit](#) [Copy](#) [Delete](#) [Export](#)

3. Add a new seller with all details.

INSERT INTO seller values('7S', 'Diya', '4');

Showing rows 0 - 6 (7 total, Query took 0.0004 seconds.)

SELECT * FROM `seller`

☐ Profiling [\[Edit inline\]](#) [\[Edit\]](#) [\[Explain SQL\]](#) [\[Create\]](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

		Sellerid	Sellername	Rating
<input type="checkbox"/>	Edit Copy Delete	1S	Abhay	3.3
<input type="checkbox"/>	Edit Copy Delete	2S	Priya	1
<input type="checkbox"/>	Edit Copy Delete	3S	Kishan	4.8
<input type="checkbox"/>	Edit Copy Delete	4S	Vicky	4.3
<input type="checkbox"/>	Edit Copy Delete	5S	Sneha	3.6
<input type="checkbox"/>	Edit Copy Delete	6S	Pushpa	2.8
<input type="checkbox"/>	Edit Copy Delete	7S	Diya	4

☐ Check all | With selected: Edit Copy Delete Export

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

4. Add a new product with all details.

INSERT INTO product values('12P', 'Classmate Notebook', 100, 4, '2C', '7S', 0.0);

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

		Productid	Product	Amount	QuantityRemaining	Categoryid	Sellerid	Rating
<input type="checkbox"/>	Edit Copy Delete	10P	Artificial Intellig	570	9	1C	2S	NULL
<input type="checkbox"/>	Edit Copy Delete	11P	Introduction to pyt	630	10	1C	5S	2
<input type="checkbox"/>	Edit Copy Delete	12P	Classmate Notebook	100	4	2C	7S	0
<input type="checkbox"/>	Edit Copy Delete	1P	The Programming lang	350	4	1C	1S	4.5
<input type="checkbox"/>	Edit Copy Delete	2P	Nike White shoes	7000	2	2C	3S	NULL
<input type="checkbox"/>	Edit Copy Delete	3P	White Lamp	800	3	3C	5S	4
<input type="checkbox"/>	Edit Copy Delete	4P	Antique Silver Earr	400	7	4C	2S	2.5
<input type="checkbox"/>	Edit Copy Delete	5P	Antique Silver Brac	700	5	4C	6S	NULL
<input type="checkbox"/>	Edit Copy Delete	6P	Catwalk leather fla	1599	3	2C	4S	1
<input type="checkbox"/>	Edit Copy Delete	7P	Introduction to Jav	650	8	1C	5S	3
<input type="checkbox"/>	Edit Copy Delete	8P	Portico King size b	1999	1	3C	1S	5
<input type="checkbox"/>	Edit Copy Delete	9P	Book rack	999	7	3C	4S	2.5

☐ Check all | With selected: Edit Copy Delete Export

5. Display the details of the products which have never sold.

SELECT * FROM product WHERE Productid NOT IN (SELECT Productid FROM order_products);

Showing rows 0 - 3 (4 total, Query took 0.0014 seconds.)

```
SELECT * FROM product WHERE Productid NOT IN (SELECT Productid FROM order_products)
```

Number of rows: 25 | Filter rows: Search this table | Sort by key: None

	Productid	Product	Amount	QuantityRemaining	Categoryid	Sellerid	Rating
<input type="checkbox"/> Edit Copy Delete	10P	Artificial Intellig	570	9	1C	2S	NULL
<input type="checkbox"/> Edit Copy Delete	12P	Classmate Notebook	100	4	2C	7S	0
<input type="checkbox"/> Edit Copy Delete	2P	Nike White shoes	7000	2	2C	3S	NULL
<input type="checkbox"/> Edit Copy Delete	5P	Antique Silver Brac	700	5	4C	6S	NULL

Number of rows: 25 | Filter rows: Search this table | Sort by key: None

6. Display the details of the seller who has not sold any product today.

SELECT * FROM seller se WHERE se.Sellerid NOT IN (SELECT DISTINCT s.Sellerid FROM seller s, orders o, order_products op WHERE o.Orderdate=CURDATE() AND o.Orderid=op.Orderid AND op.Sellerid=s.Sellerid);

Showing rows 0 - 6 (7 total, Query took 0.0018 seconds.)

```
SELECT * FROM seller s1 WHERE s1.Sellerid NOT IN (SELECT DISTINCT s.Sellerid FROM seller s, orders o, order_products op WHERE o.Orderdate=CURDATE() AND o.Orderid=op.Orderid AND op.Sellerid=s.Sellerid)
```

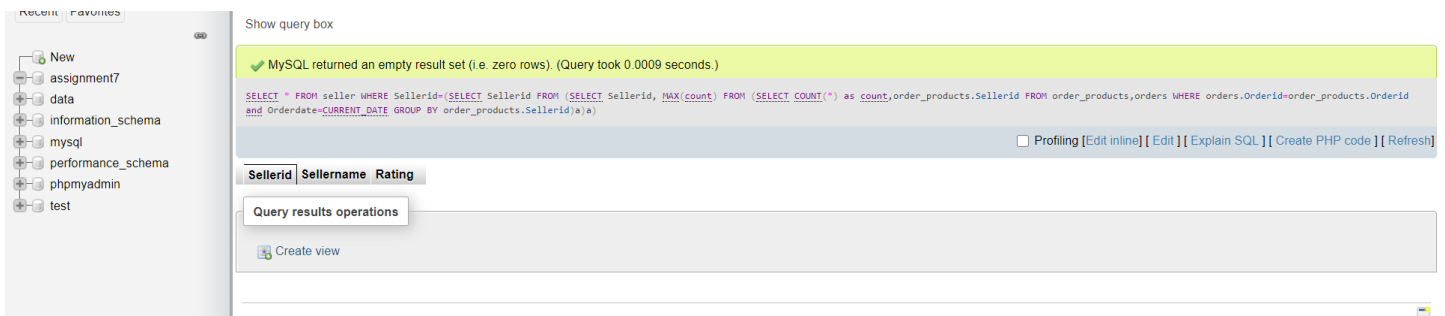
Number of rows: 25 | Filter rows: Search this table | Sort by key: None

	Sellerid	Sellername	Rating
<input type="checkbox"/> Edit Copy Delete	1S	Abhay	3.3
<input type="checkbox"/> Edit Copy Delete	2S	Priya	1
<input type="checkbox"/> Edit Copy Delete	3S	Kishan	4.8
<input type="checkbox"/> Edit Copy Delete	4S	Vicky	4.3
<input type="checkbox"/> Edit Copy Delete	5S	Sneha	3.6
<input type="checkbox"/> Edit Copy Delete	6S	Pushpa	2.8
<input type="checkbox"/> Edit Copy Delete	7S	Diya	4

Number of rows: 25 | Filter rows: Search this table | Sort by key: None

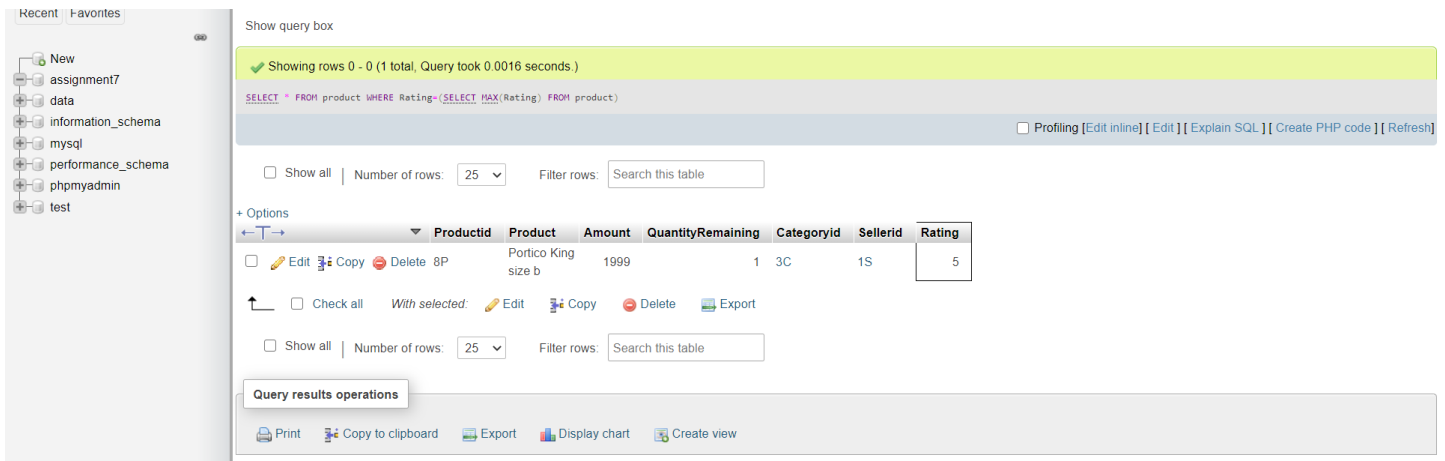
7. Display the details of the seller who has sold the highest amount of products today.

SELECT * FROM seller WHERE Sellerid=(SELECT Sellerid FROM (SELECT Sellerid, MAX(count) FROM (SELECT COUNT(*) as count,order_products.Sellerid FROM order_products,orders WHERE orders.Orderid=order_products.Orderid and Orderdate=CURRENT_DATE GROUP BY order_products.Sellerid)a)a);



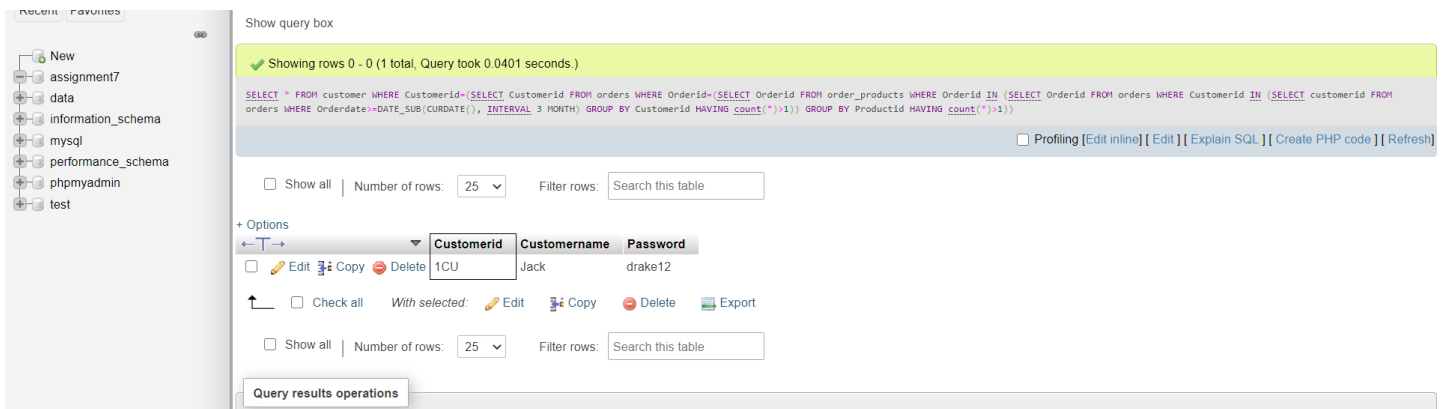
8. Display the product details with the highest rating.

SELECT * FROM product WHERE Rating=(SELECT MAX(Rating) FROM product);



9. Display the customer details who has repeated the same product purchase in the last three months.

SELECT * FROM customer WHERE Customerid=(SELECT Customerid FROM orders WHERE Orderid=(SELECT Orderid FROM order_products WHERE Orderid IN (SELECT Orderid FROM orders WHERE Customerid IN (SELECT customerid FROM orders WHERE Orderdate>=DATE_SUB(CURDATE(), INTERVAL 3 MONTH) GROUP BY Customerid HAVING count(*)>1)) GROUP BY Productid HAVING count(*)>1));



10. Display the seller details who is second highest in selling products in the last three months.

SELECT * FROM seller WHERE Sellerid IN

(SELECT Sellerid FROM

(SELECT MAX(count_) as c,Sellerid FROM

(SELECT COUNT(*) as count_op,sellerid as sellerid FROM orders as o,order_products as op WHERE o.orderdate>=DATE_SUB(CURDATE(), INTERVAL 3 MONTH) and o.orderid=op.orderid GROUP BY op.sellerid HAVING count_ <

(SELECT sold FROM (SELECT MAX(sold) as sold,Sellerid FROM (SELECT COUNT(*) as sold,op.sellerid as sellerid FROM orders as o,order_products as op WHERE o.orderdate>=DATE_SUB(CURDATE(), INTERVAL 3 MONTH) and o.orderid=op.orderid GROUP BY op.sellerid)a)a)a)a);

The screenshot shows a database management tool interface. On the left is a sidebar with a tree view of database objects including 'New', 'assignment7', 'category', 'customer', 'orders', 'order_products', 'product', 'seller', 'data', 'information_schema', 'mysql', 'performance_schema', 'phpmyadmin', and 'test'. The main area displays a query result for the 'seller' table. The query is: `SELECT * FROM seller WHERE Sellerid IN (SELECT Sellerid FROM (SELECT MAX(count_) as c,Sellerid FROM (SELECT COUNT(*) as count_op,sellerid as sellerid FROM orders as o,order_products as op WHERE o.orderdate>=DATE_SUB(CURDATE(), INTERVAL 3 MONTH) and o.orderid=op.orderid GROUP BY op.sellerid HAVING count_ < (SELECT sold FROM (SELECT MAX(sold) as sold,Sellerid FROM (SELECT COUNT(*) as sold,op.sellerid as sellerid FROM orders as o,order_products as op WHERE o.orderdate>=DATE_SUB(CURDATE(), INTERVAL 3 MONTH) and o.orderid=op.orderid GROUP BY op.sellerid)a)a)a)a);`. The result shows one row: Sellerid 1S, Sellername Abhay, Rating 4.66667. Below the table are options for editing, deleting, and exporting the selected row.

11. Display products in the descending order of product amount sold by the seller who is having the highest rating.

SELECT * FROM order_products WHERE Sellerid=(SELECT Sellerid FROM seller WHERE Rating=(SELECT MAX(Rating) FROM seller)) ORDER BY OriginalAmount DESC;

The screenshot shows a database management tool interface. On the left is a sidebar with a tree view of database objects including 'New', 'assignment7', 'data', 'information_schema', 'mysql', 'performance_schema', 'phpmyadmin', and 'test'. The main area displays a query result for the 'order_products' table. The query is: `SELECT * FROM order_products WHERE Sellerid=(SELECT Sellerid FROM seller WHERE Rating=(SELECT MAX(Rating) FROM seller)) ORDER BY OriginalAmount DESC`. The result shows one row: Orderid 40, Productid 4P, Sellerid 3S, Rating 3, Quantity 1, OriginalAmount 400, Discount 0. Below the table are options for editing, deleting, and exporting the selected row. A warning message at the top states: 'Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.'

12. Update the seller ratings as per the new entries in Order_Products table.

UPDATE seller s SET s.Rating = (SELECT AVG(Rating) FROM order_products GROUP BY Sellerid HAVING Sellerid = s.Sellerid);

Recent Favorites

New
assignment7
data
information_schema
mysql
performance_schema
phpmyadmin
test

Showing rows 0 - 6 (7 total, Query took 0.0005 seconds.)

SELECT * FROM `seller`

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

	Sellerid	Sellername	Rating
<input type="checkbox"/> Edit Copy Delete	1S	Abhay	4.66667
<input type="checkbox"/> Edit Copy Delete	2S	Priya	2
<input type="checkbox"/> Edit Copy Delete	3S	Kishan	3
<input type="checkbox"/> Edit Copy Delete	4S	Vicky	2
<input type="checkbox"/> Edit Copy Delete	5S	Sneha	2.6
<input type="checkbox"/> Edit Copy Delete	6S	Pushpa	NULL
<input type="checkbox"/> Edit Copy Delete	7S	Diya	NULL

☐ Check all | With selected: Edit Copy Delete Export

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

13. Display the list of products having quantity remaining <= 4.

SELECT * FROM product WHERE QuantityRemaining<=4;

New
assignment7
data
information_schema
mysql
performance_schema
phpmyadmin
test

Showing rows 0 - 5 (6 total, Query took 0.0006 seconds.)

SELECT * FROM product WHERE QuantityRemaining<=4

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

	Productid	Product	Amount	QuantityRemaining	Categoryid	Sellerid	Rating
<input type="checkbox"/> Edit Copy Delete	12P	Classmate Notebook	100	4	2C	7S	0
<input type="checkbox"/> Edit Copy Delete	1P	The Programming lang	350	4	1C	1S	4.5
<input type="checkbox"/> Edit Copy Delete	2P	Nike White shoes	7000	2	2C	3S	NULL
<input type="checkbox"/> Edit Copy Delete	3P	White Lamp	800	3	3C	5S	4
<input type="checkbox"/> Edit Copy Delete	6P	Catwalk leather fla	1599	3	2C	4S	1
<input type="checkbox"/> Edit Copy Delete	8P	Portico King size b	1999	1	3C	1S	5

☐ Check all | With selected: Edit Copy Delete Export

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None