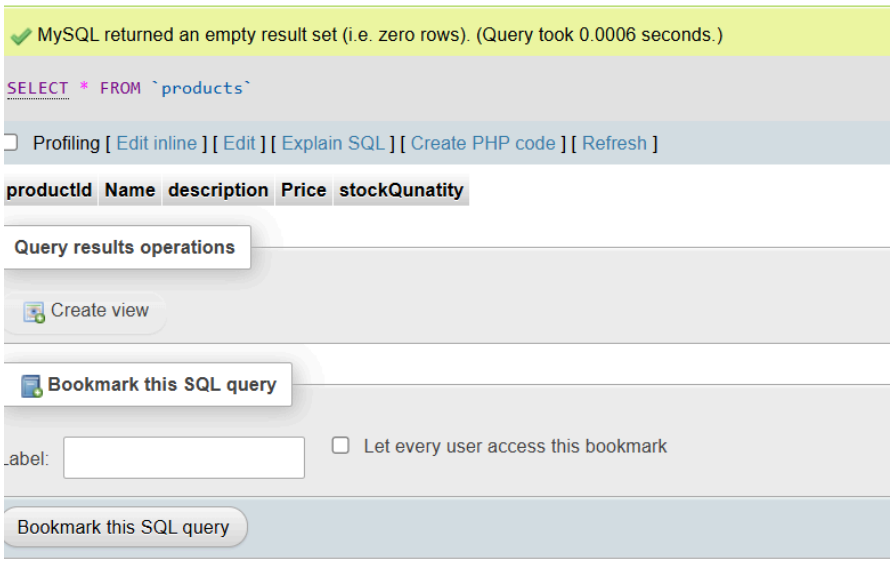
Promod Chandra Das
ID: 231002005

Answer to the Q no: 1

1. CREATE DATABASE E_commerceDatabaseSchema;

2.
```
CREATE table Products(
   productId int (11) NOT NULL,
   Name varchar (255) Not Null,
   description varchar(500) NOT NULL,
   Price  int  Not null,
   stockQunatity int Not Null,
   PRIMARY KEY (productId)
   );
```



2. CREATE TABLE ORDERS(

```
  CREATE TABLE ORDERS(
   OrderId int Not Null,
   userId int not null,
   order_date date not null,
   status varchar(255) not null,
   total_amount int Not null,
   primary key( OrderId,UserId)
   );
```

Server: 127.0.0.1 » Database: e_commercedatabaseschema » Table: orders

Browse | Structure | SQL | Search | Insert | Export

Table structure | Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comme
1	**OrderId**	int(11)			No	*None*	
2	**userId**	int(11)			No	*None*	
3	**order_date**	date			No	*None*	
4	**status**	varchar(255)	utf8mb4_general_ci		No	*None*	
5	**total_amount**	int(11)			No	*None*	

3.

```
CREATE TABLE Order_Items(
  OrderitemId int Not Null,
  orderId int not null,
    productid int not null,
   Quantity int Not null,
   prince int Not null,
  primary key(OrderitemId , orderId, productid)
  );
```

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges

Table structure | Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	**OrderitemId**	int(11)			No	*None*			Change Drop More
2	**orderId**	int(11)			No	*None*			Change Drop More
3	**productid**	int(11)			No	*None*			Change Drop More
4	**Quantity**	int(11)			No	*None*			Change Drop More
5	**prince**	int(11)			No	*None*			Change Drop More

4.Insert the First value Product Table:

insert into products (productId,Name,description,Price,stockQunatity)
VALUES(231002005,'Promod Chandra Das', 'Good',50000,1000);

insert into products (productId,Name,description,Price,stockQunatity)
VALUES(231002006,'Realme ', 'best ',50000,1000);

insert into products (productId,Name,description,Price,stockQunatity)
VALUES(231002007,'Iphone ', 'top ',1200000,100000);

Showing rows 0 - 2 (3 total, Query took 0.0004 seconds.)

```
SELECT * FROM `products`
```

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

xtra options

	productId	Name	description	Price	stockQunatity
Edit Copy Delete	231002005	Promod Chandra Das	Good	50000	1000
Edit Copy Delete	231002006	Realme	best	50000	1000
Edit Copy Delete	231002007	Iphone	top	1200000	100000

Check all *With selected:* Edit Copy Delete Export

Insert the value Orders table:

1.
INSERT INTO Orders (orderId, userId, order_date, status, total_amount)
VALUES
(101, 1, '2024-12-20', 'Processing', 2300),
(102, 2, '2024-12-21', 'Shipped', 800),
(103, 3, '2024-12-22', 'Delivered', 200);

Showing rows 0 - 3 (4 total, Query took 0.0004 seconds.)

```
ELECT * FROM `orders`
```

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

xtra options

	OrderId	userId	order_date	status	total_amount
Edit Copy Delete	101	1	2024-12-20	Processing	2300
Edit Copy Delete	102	2	2024-12-21	Shipped	800
Edit Copy Delete	103	3	2024-12-22	Delivered	200
Edit Copy Delete	231002005	101	2024-12-23	Best	10000000

Check all *With selected:* Edit Copy Delete Export

Insert the Order_name table value insert

INSERT INTO Order_Items (orderItemId, orderId, productId, Quantity,prince)
VALUES
(1, 101, 1, 1, 1500),
(2, 101, 3, 4, 800),
(3, 102, 2, 1, 800);

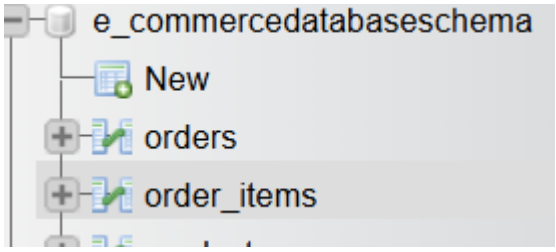
Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

xtra options

	OrderitemId	orderId	productid	Quantity	prince
Edit Copy Delete	1	101	1	1	1500
Edit Copy Delete	2	101	3	4	800
Edit Copy Delete	3	102	2	1	800

Check all *With selected:* Edit Copy Delete Export

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

Total: 

Answer to the q no:2

a) Retrieve all product that have a stock quantity greater than 50

```
SELECT orderId, userId, order_date, status, total_amount
FROM Orders
WHERE userId = <specific_user_id>;
```

b) Get the details of an order (Order_id, user_id,order _date, status,total amount of a specific user)

```
SELECT orderId, userId, order_date, status, total_amount
FROM Orders
WHERE userId = <specific_user_id>;
```

c) Retrieve the product details (name,description,price) for all product included in Order Id

```
SELECT p.Name, p.description, p.Price
```

```
FROM Products p
JOIN Order_Items oi ON p.productId = oi.productId
WHERE oi.orderId = <specific_order_id>; -- Replace <specific_order_id>
with the Order ID
```

d) Retrieve the details of the product with the highest price

```
SELECT *
FROM Products
ORDER BY Price DESC
LIMIT 1;
```

e) Update the total_amount filed in the orders table for a specific order basd on its items quantities and price

```
UPDATE Orders o
SET total_amount = (
    SELECT SUM(oi.Quantity * oi.Price)
    FROM Order_Items oi
    WHERE oi.orderId = o.orderId
)
WHERE o.orderId = <specific_order_id>; -- Replace <specific_order_id>
with the Order ID
```

Answer to the q no : 03

a) List all products are included in at least one order but have a stock quantity of less than 10

```
SELECT DISTINCT p.*
FROM Products p
JOIN Order_Items oi ON p.productId = oi.productId
WHERE p.stockQuantity < 10;
```

b) Write a trigger that automatically updates the stock_quantity in the product tabel when a new record is inserted into the order_item table

```
DELIMITER $$

CREATE TRIGGER update_stock_quantity
AFTER INSERT ON Order_Items
FOR EACH ROW
BEGIN
    UPDATE Products
    SET stockQuantity = stockQuantity - NEW.Quantity
    WHERE productId = NEW.productId;
END$$

DELIMITER ;
```