ROBERT GORDON UNIVERSITY ABERDEEN

INFORMATICS INSTITUTE OF TECHNOLOGY

DATABASE COURSEWORK AMAZON REPORT

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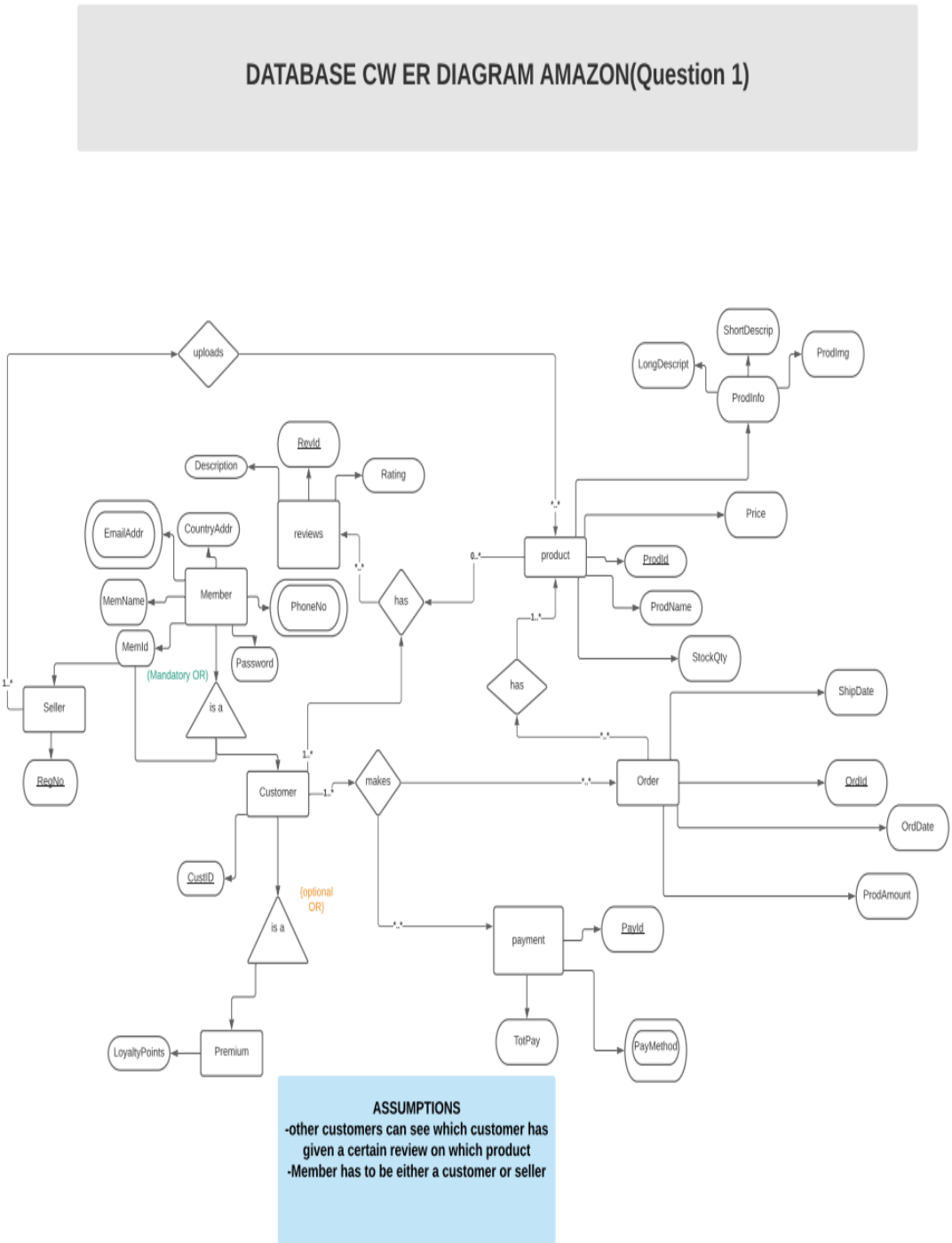
IIT ID-20200306

RGU ID-2016278

Question 1-ER DIAGRAM(PDF also attached at the end)



Question 2

Logical Schema

Customer(CustId:char,MemId:char,

MemName:varchar,CountryAddr:varchar,Email:varchar,Password:varchar)

Seller(RegNo:char,MemName:varchar,CountryAddr:varchar,Email:varchar,Password:varchar,MemId:char)

PhoneNoSeller(PhoneNo:char,RegNo:char(fk))

PhoneNoCustomer(PhoneNo:char,CustId:char(fk))

Product(LongDescrip:varchar,ShortDescrip:varchar,ProdImg:blob,Price:float,ProdId:char,ProdName:varchar,StockQty:int)

Seller_Product(RegNo:char(pk)(fk),ProdId:char(pk)(fk))

Customer_Premium(CustId:char,LoyaltyPoints:integer)

Customer_Payment_Order(CustId:char(pk)(fk),PayId:char(pk)(fk),OrdId:char(pk)(fk))

Payment(PayId:char,TotPay:float)

PayMethod(PayMethod:varchar,PayId:char(fk))

Order(OrdId:char,ShipDate:date,OrdDate:date,ProdAmount:float)

Reviews(RevId:char,Rating:varchar,Description:varchar)

Customer_Product_Reviews(CustId:char(pk)(fk),ProdId:char(pk)(fk),RevId:char(pk)(fk))

Order_Product(ProdId:char(pk)(fk),OrdId:char(pk)(fk))

Question3

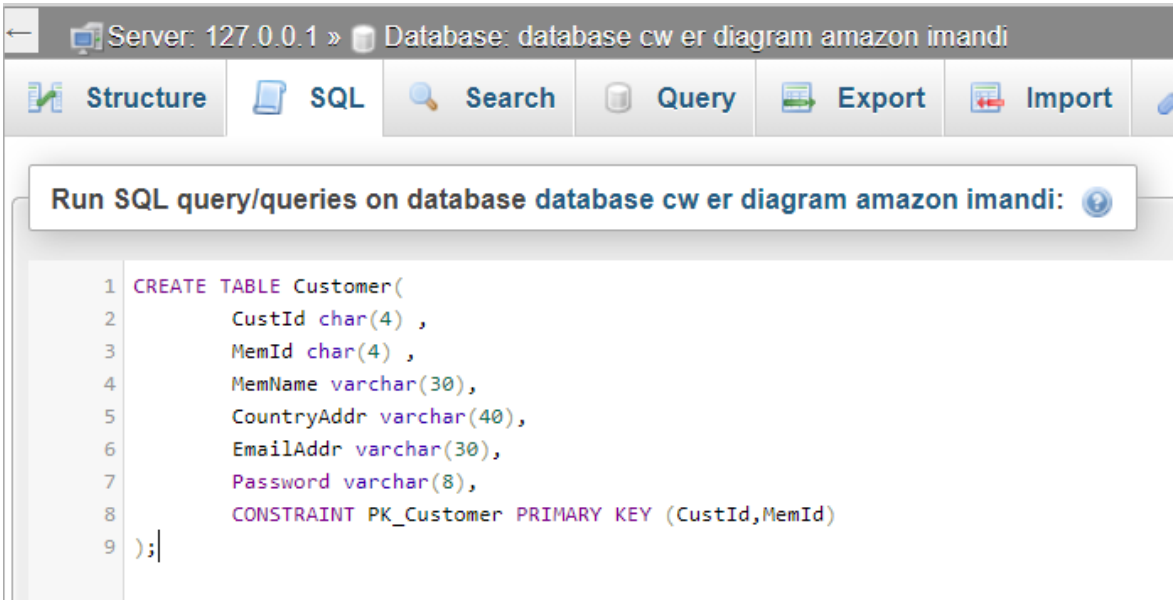
the tables are all in 1NF since all attributes are atomic.

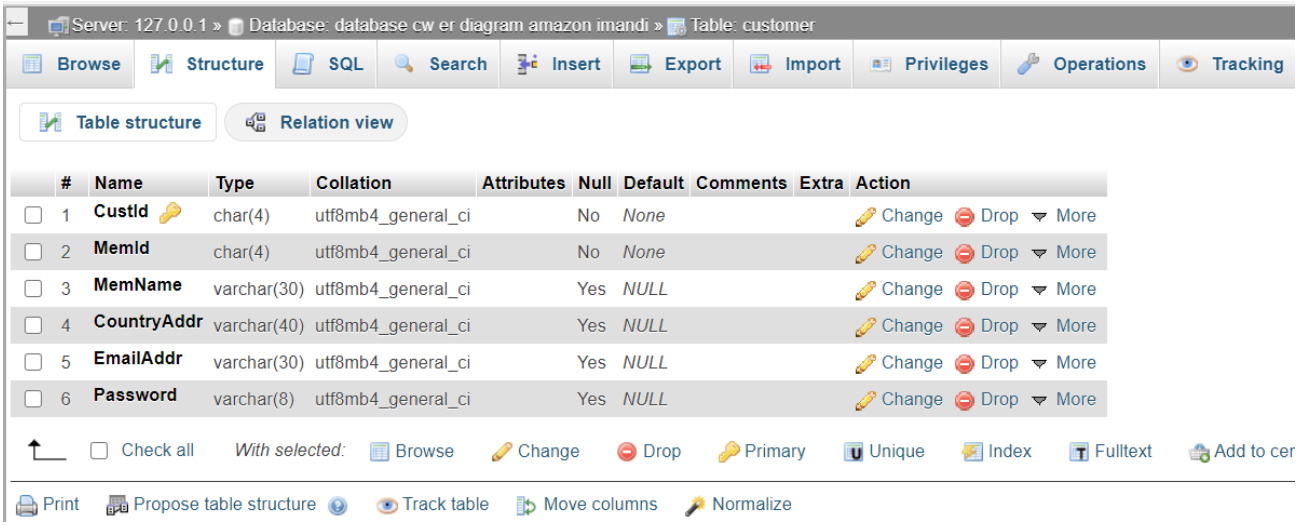
the tables are all in 2NF since there is no partial dependencies.

the tables are all in 3NF since there is no transitive dependencies.

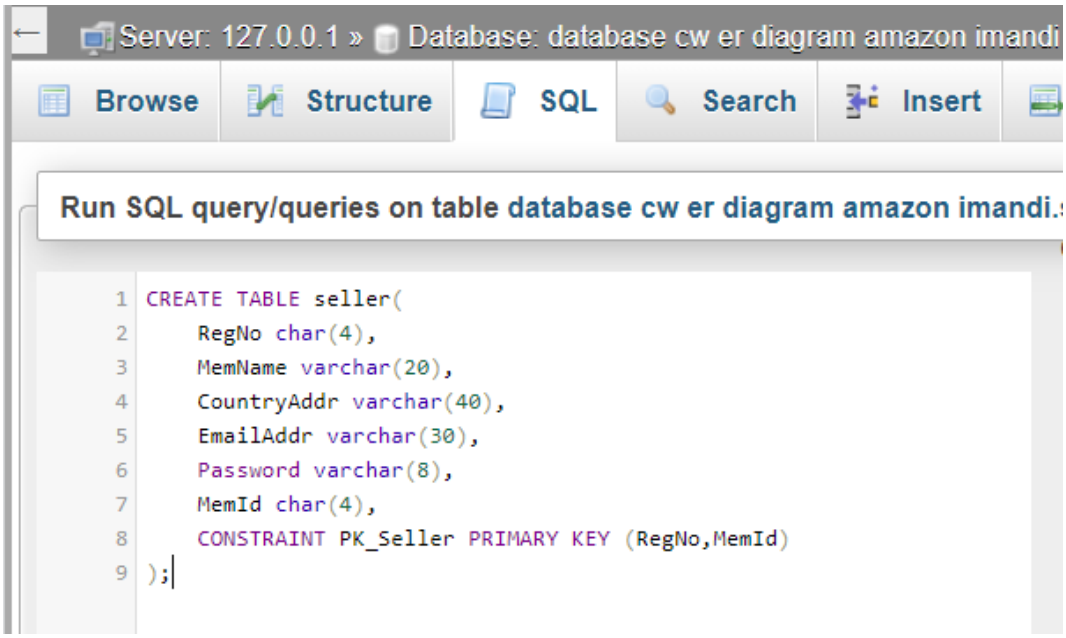
Question 4

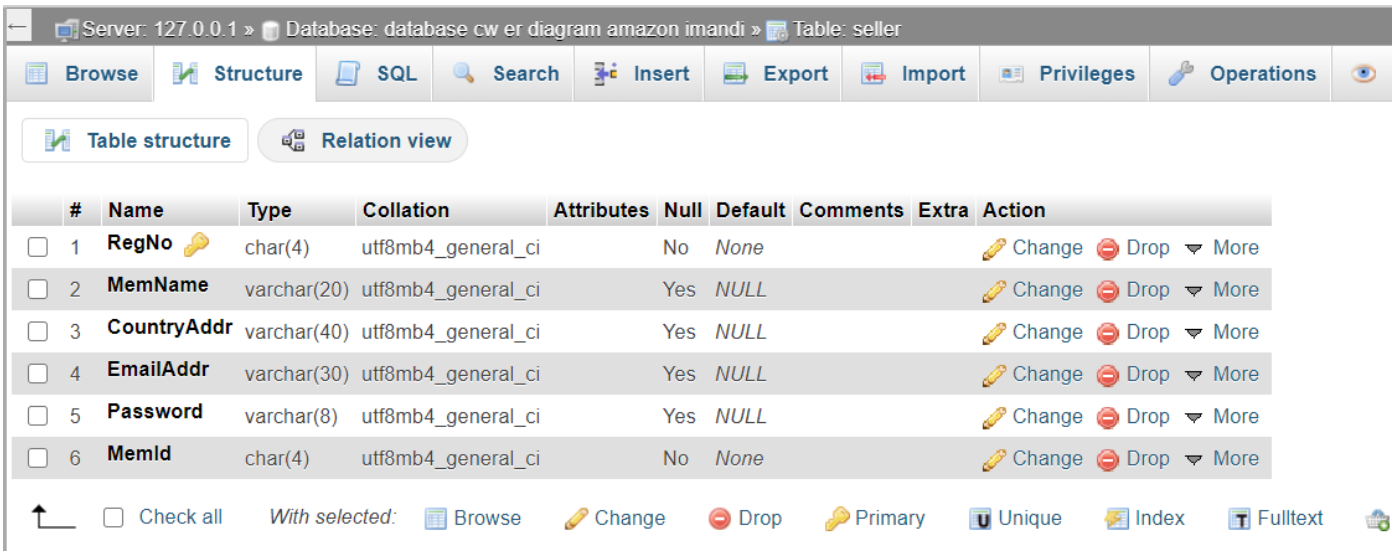
1) Creating Customer Table



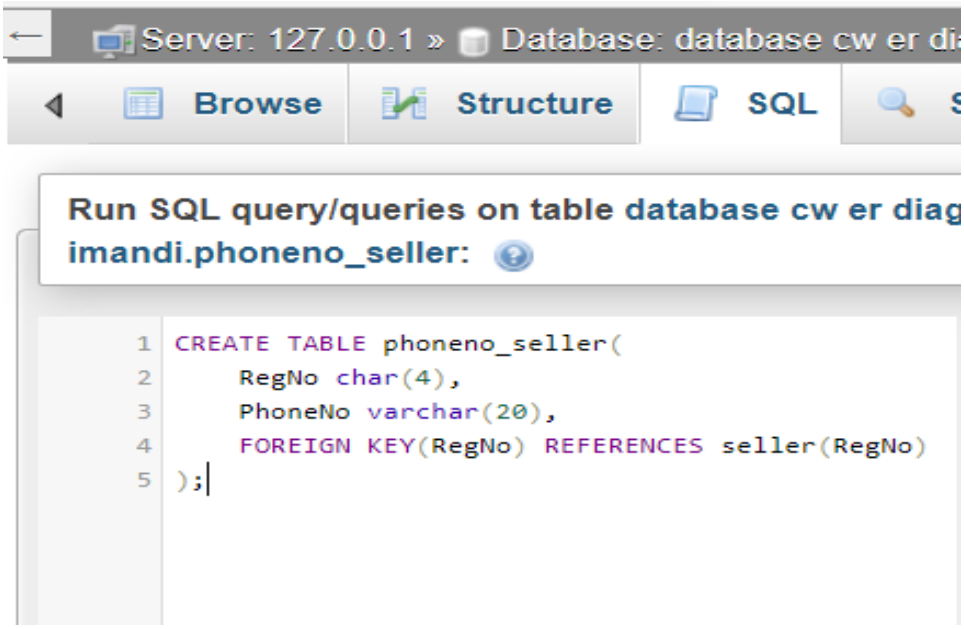


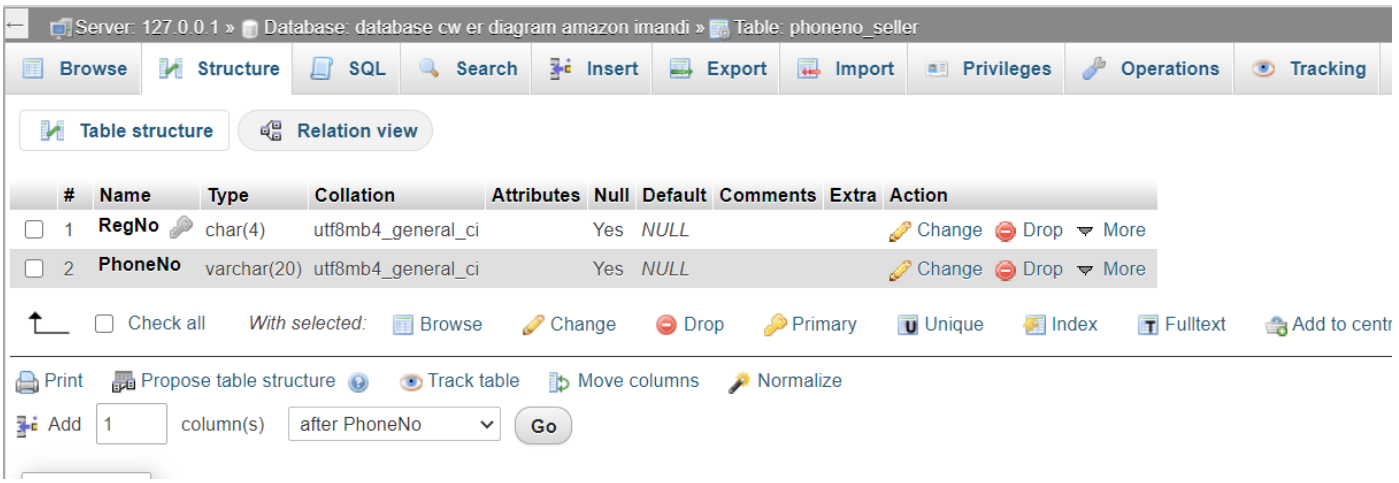
2)Creating Seller Table



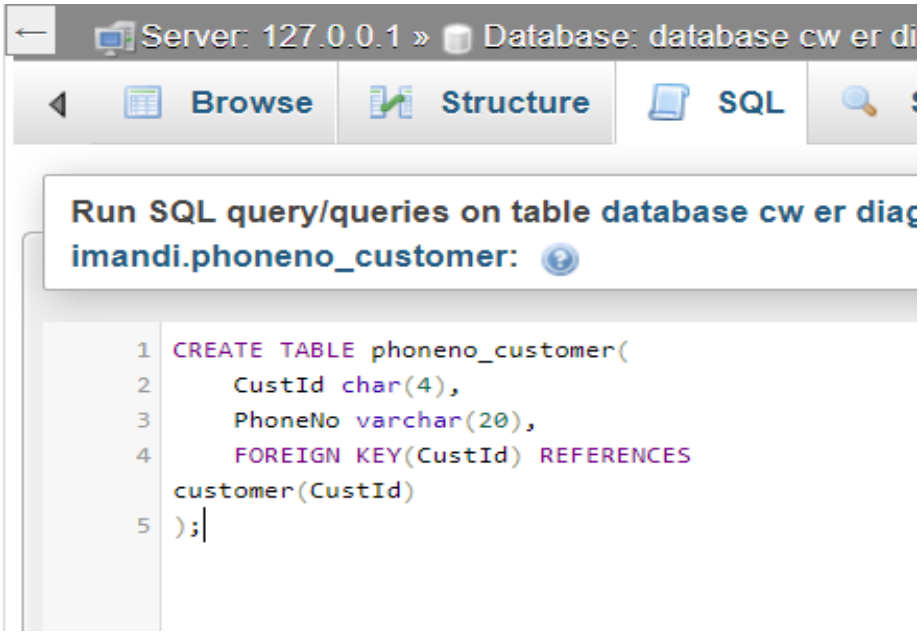


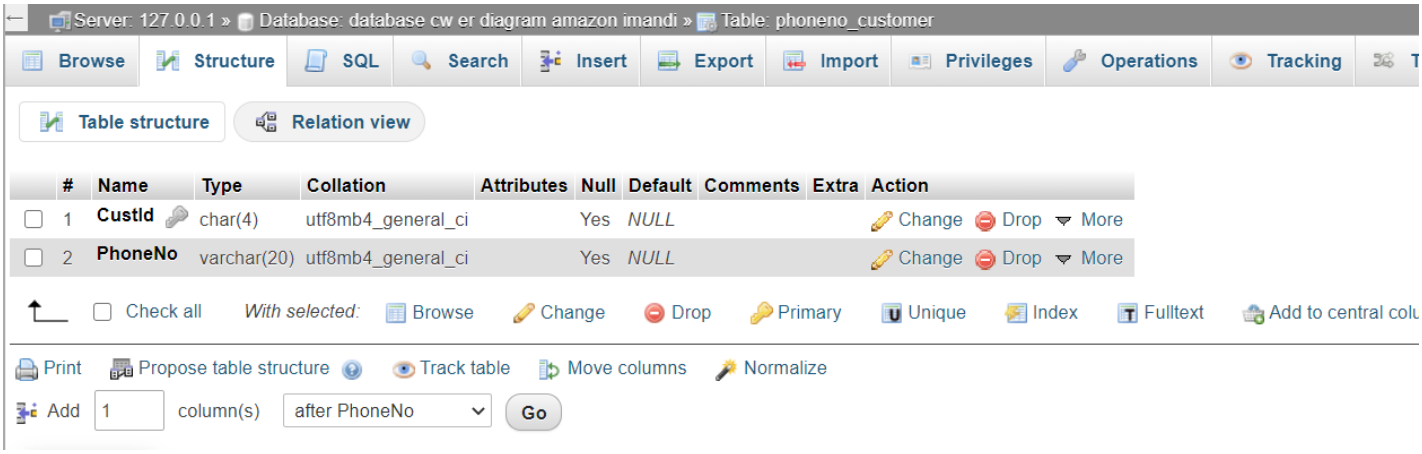
3)Creating phoneno_seller Table



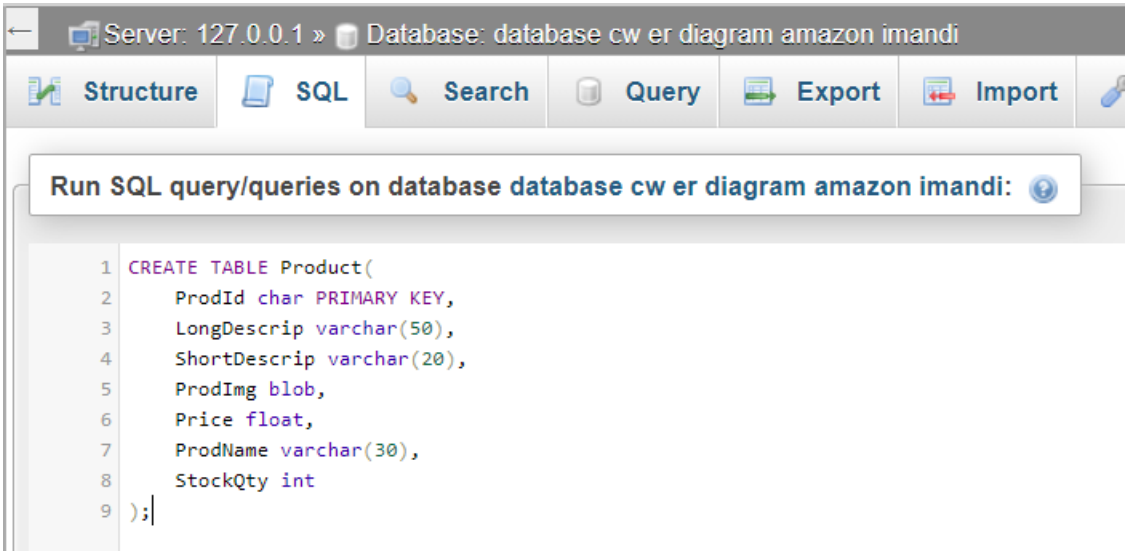


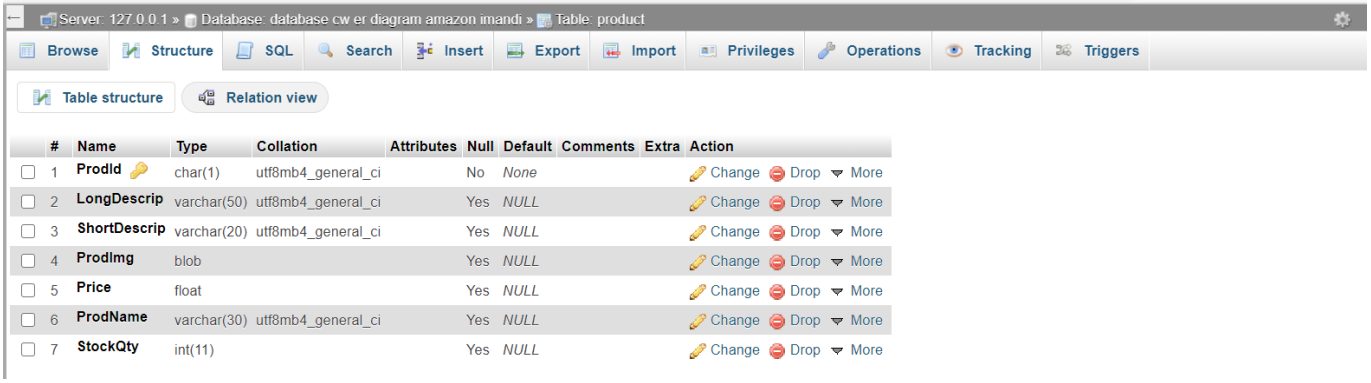
4)Creating phoneno_customer table



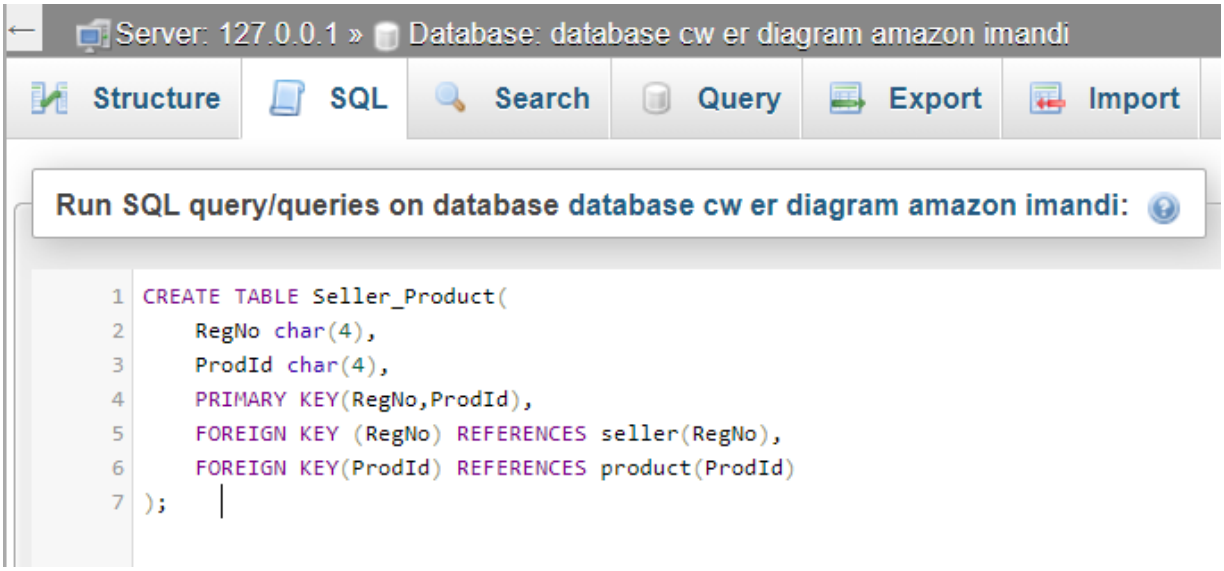


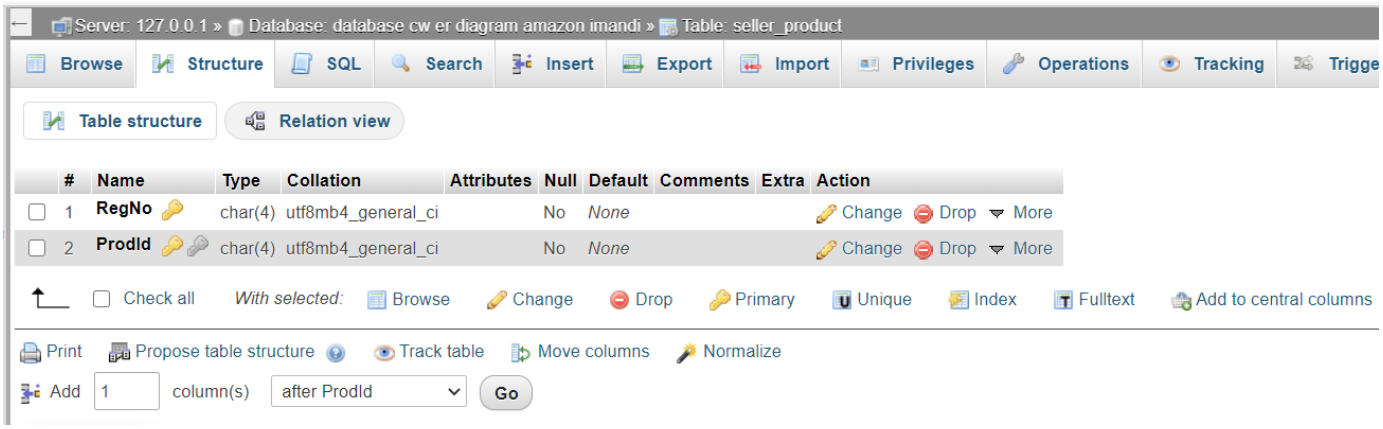
5)Creating Product Table



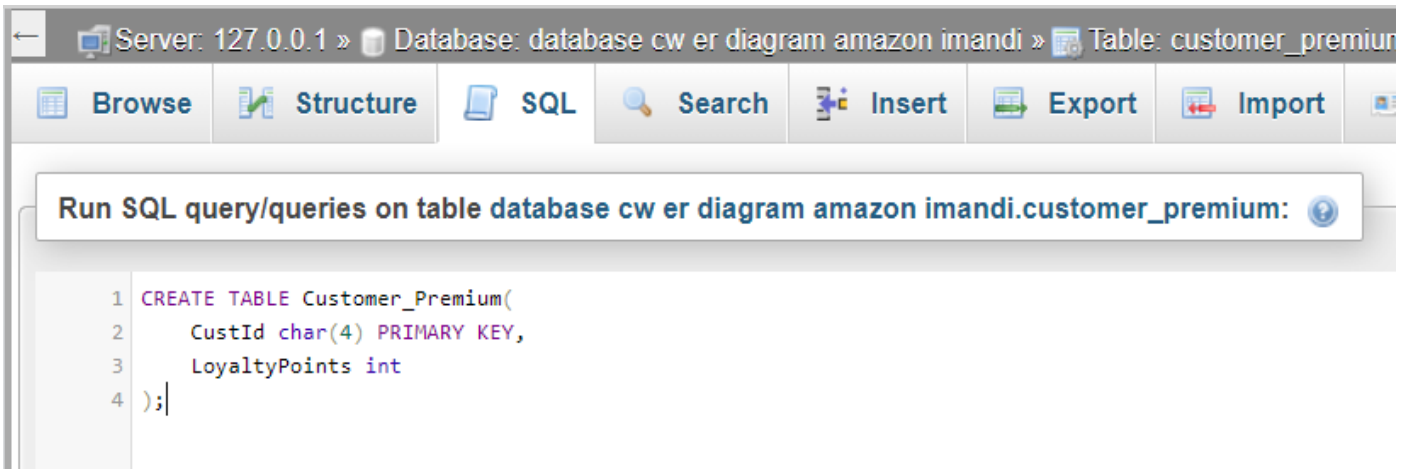


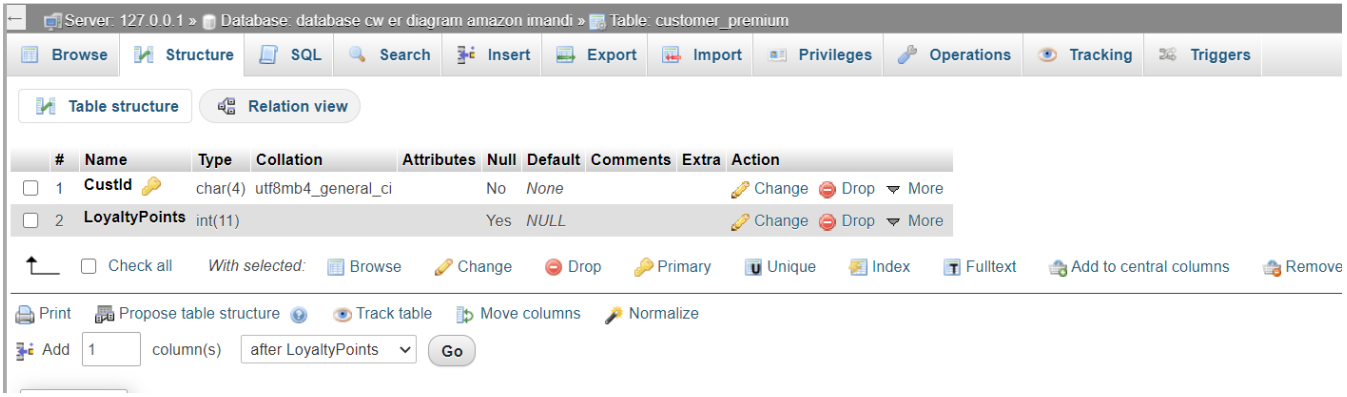
6)Creating seller_product Table



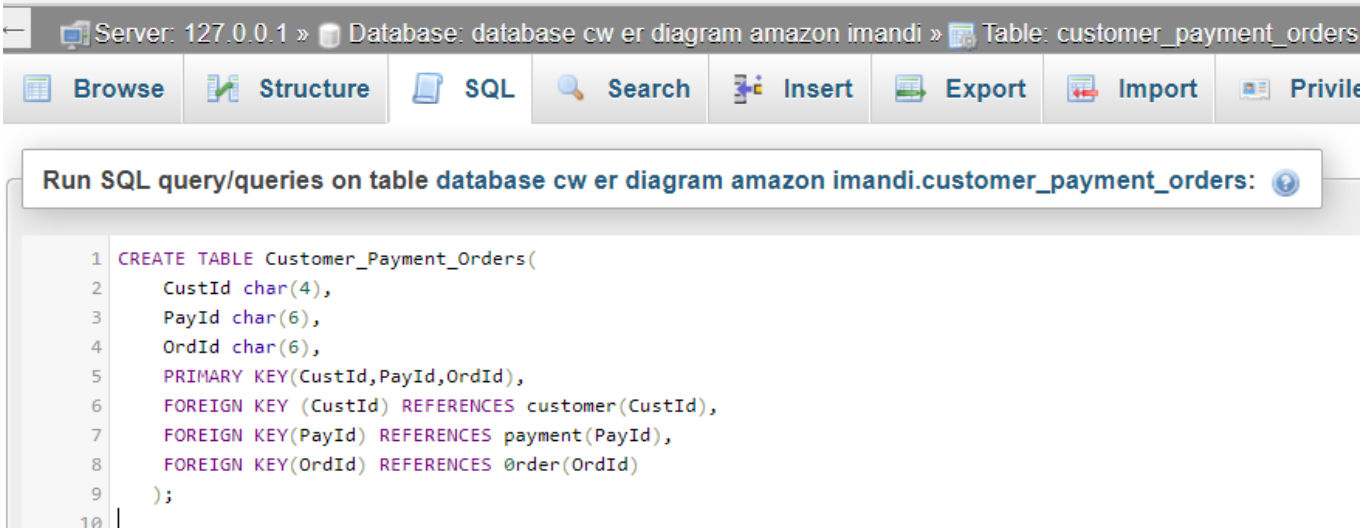


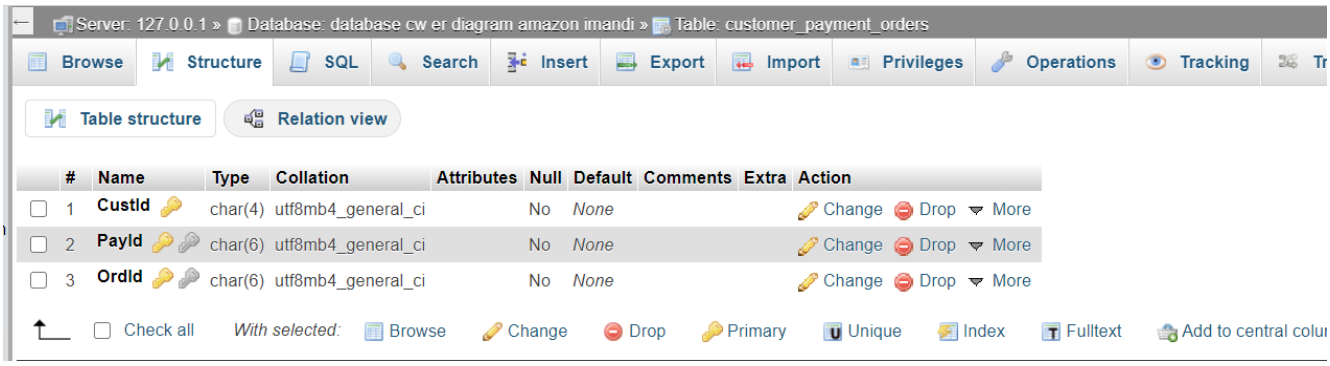
7)Creating customer_premium Table



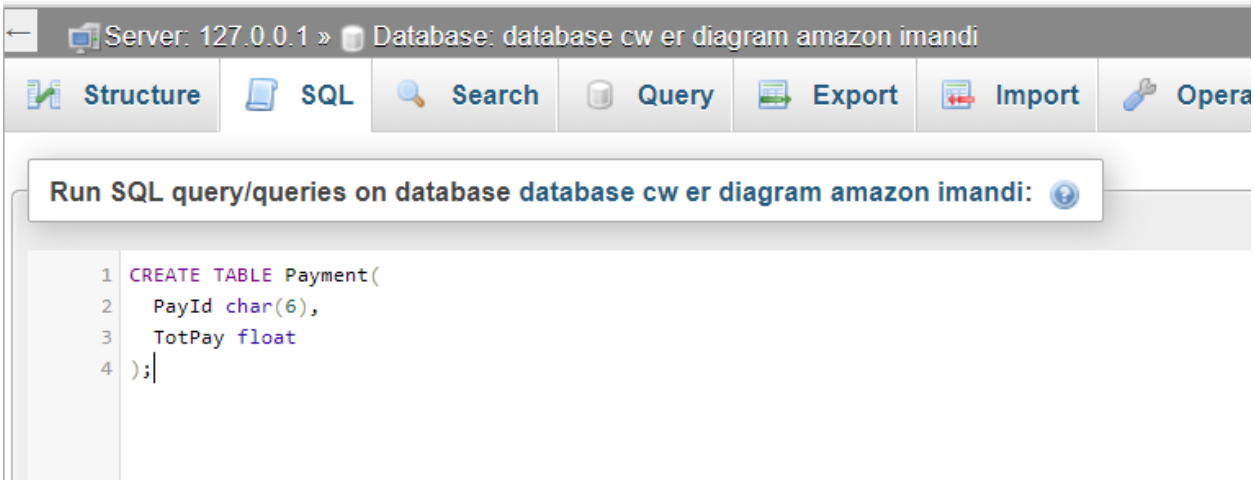


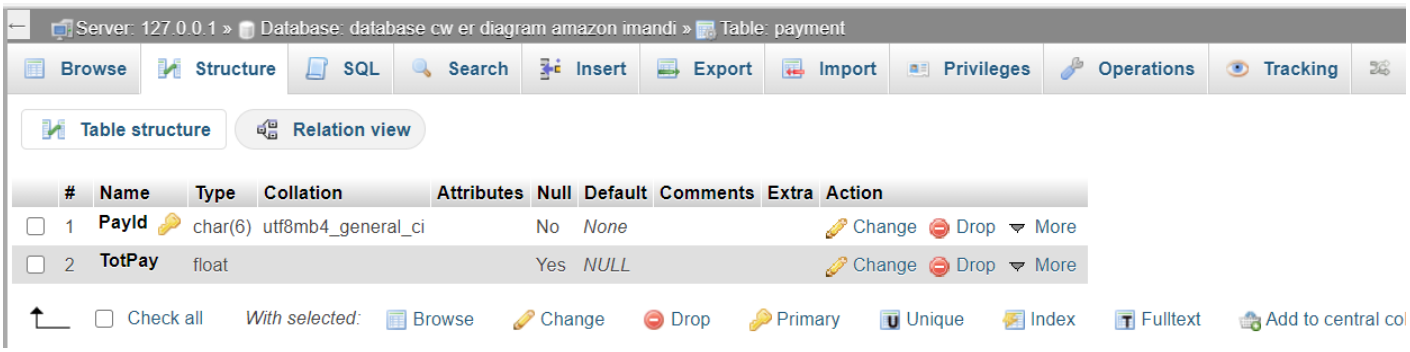
8)Creating customer_payment_0rder Table



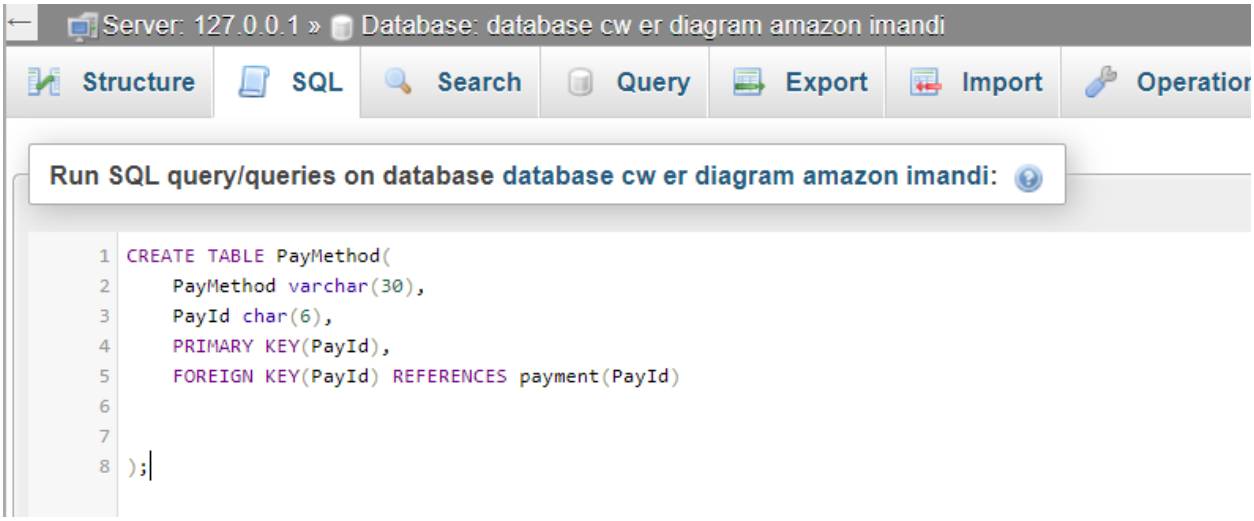


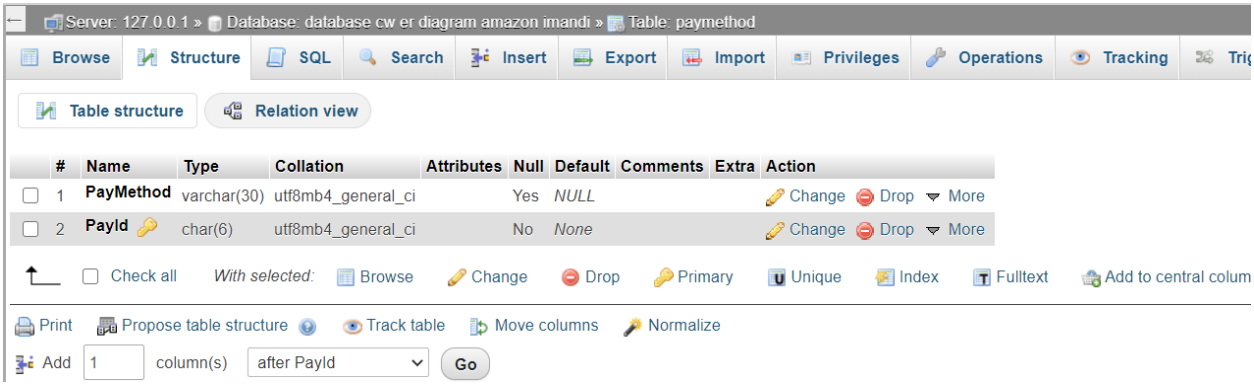
9)Creating payment Table



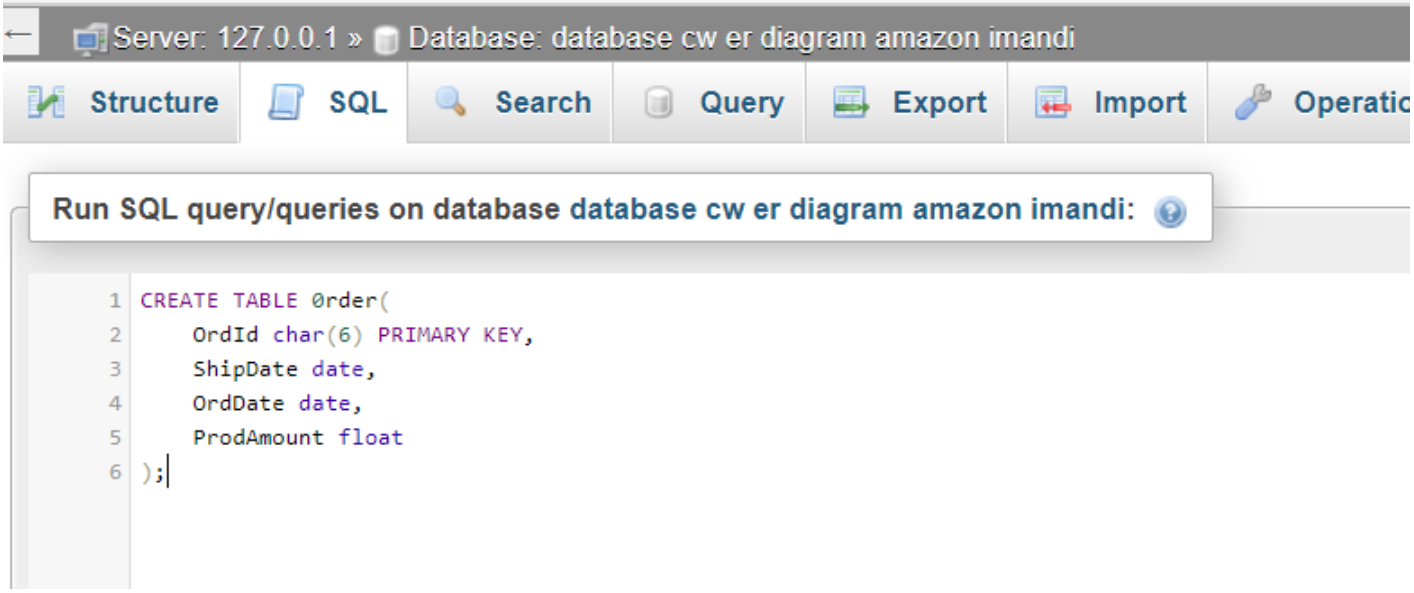


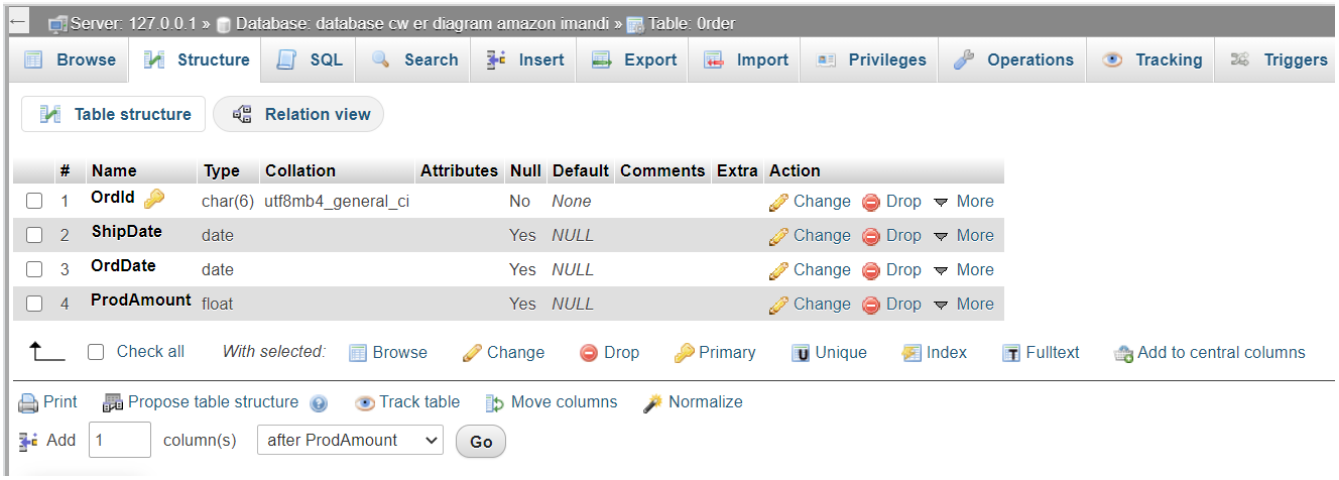
10)Creating paymethod Table



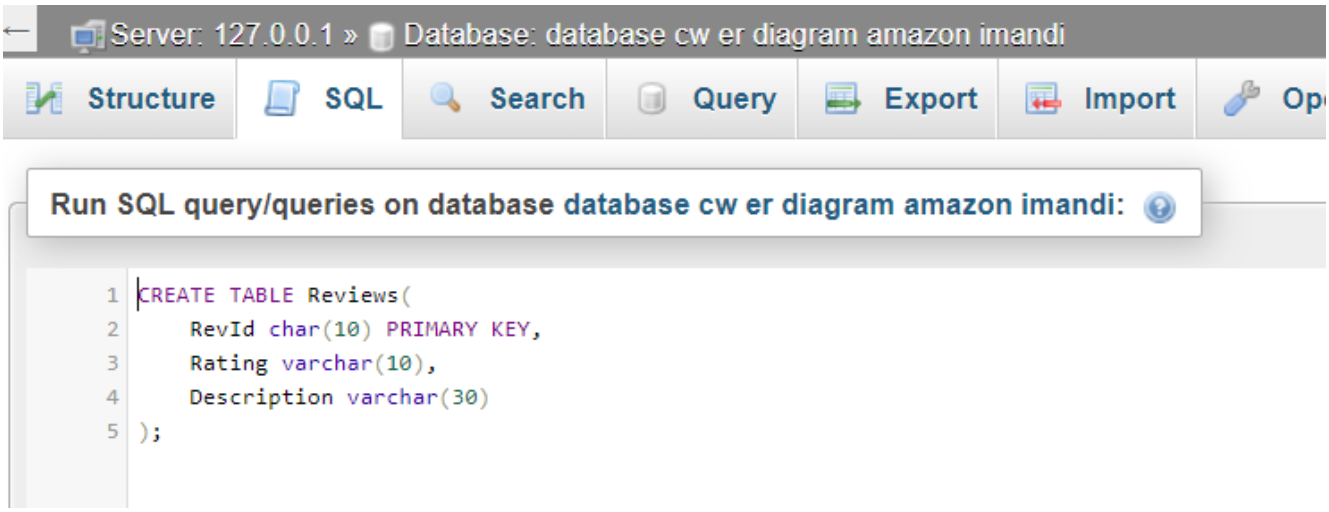


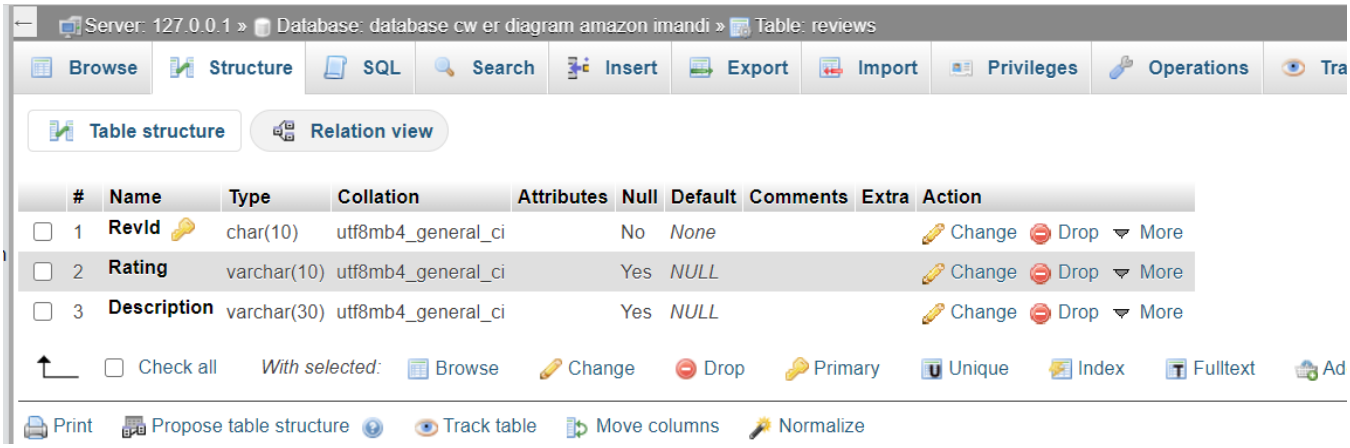
11)Creating order Table



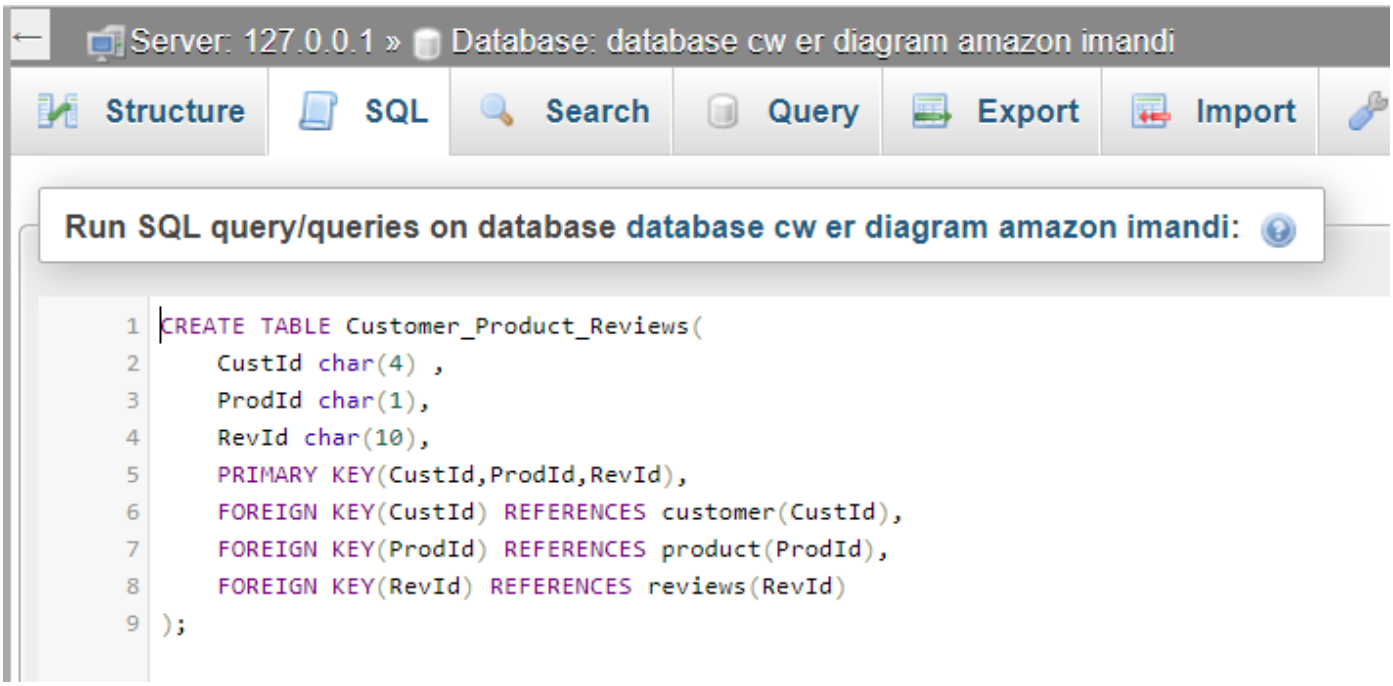


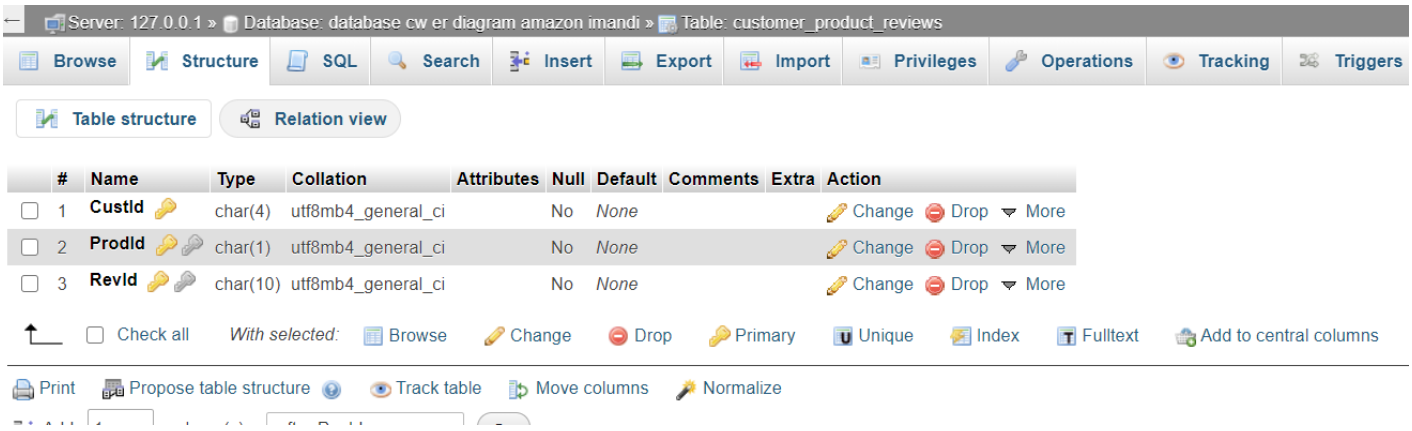
12)Creating reviews Table



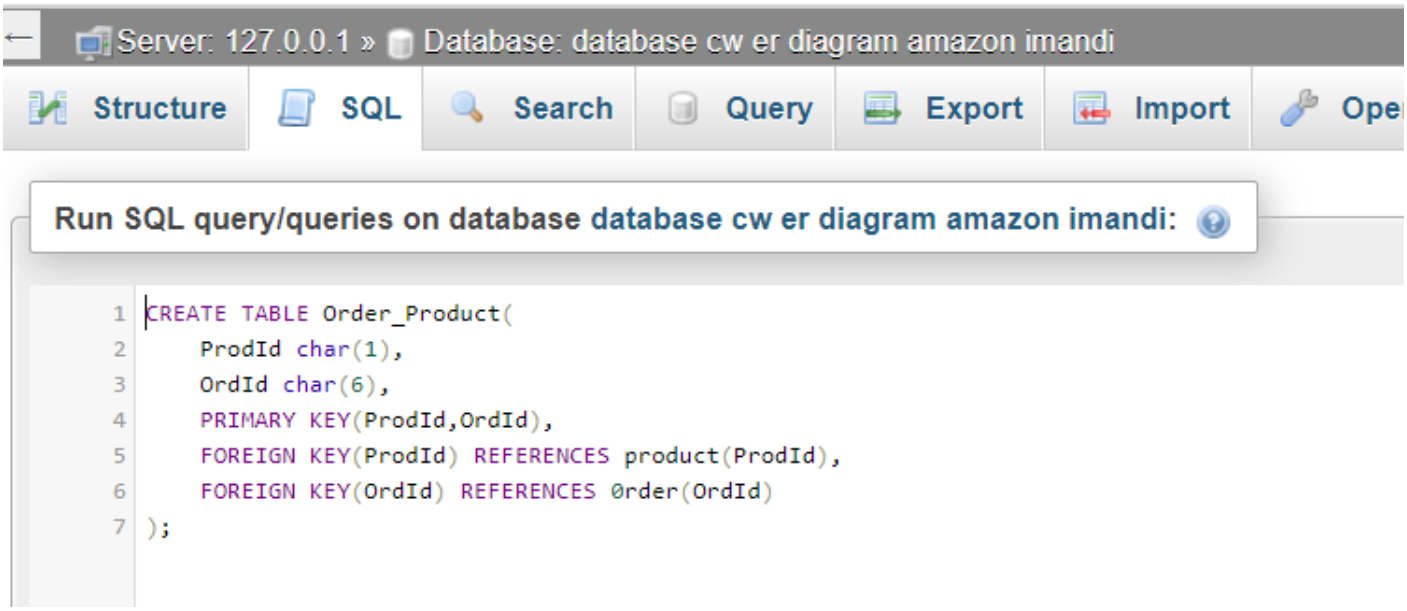


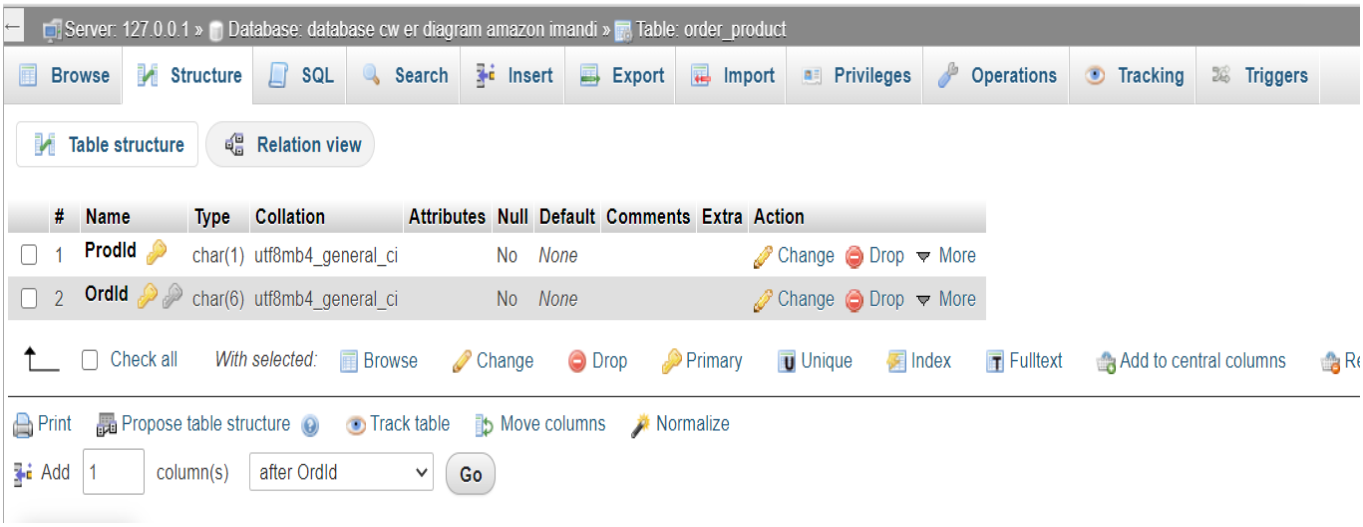
13)Creating customer_product_review Table





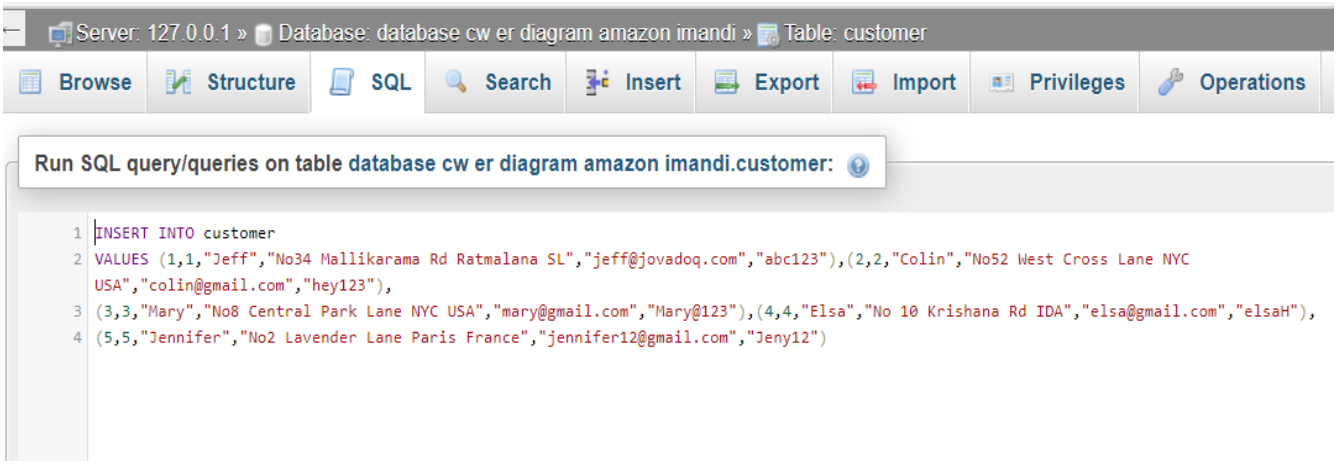
14)Creating order_product Table

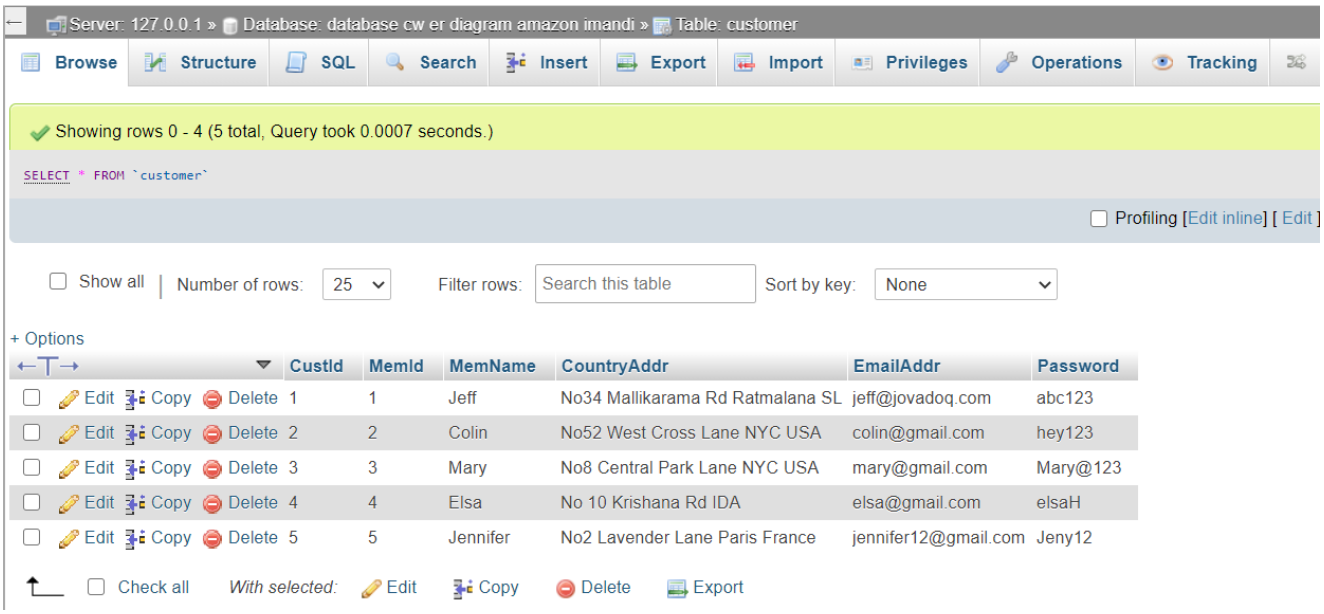

Server: 127.0.0.1 » Database: database cw er diagram amazon imandi
Structure
SQL
Search
Query
Export
Import
Run SQL query/queries on database database cw er diagram amazon imandi:
CREATE TABLE Order_Product(
ProdId char(1),
OrdId char(6),
PRIMARY KEY(ProdId,OrdId),
FOREIGN KEY(ProdId) REFERENCES product(ProdId),
FOREIGN KEY(OrdId) REFERENCES Order(OrdId)
);


Server: 127.0.0.1 » Database: database cw er diagram amazon imandi » Table: order_product
Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Tracking
Triggers
Table structure
Relation view
Name Type Collation Attributes Null Default Comments Extra Action
1 ProdId char(1) utf8mb4_general_ci No None Change Drop More
2 OrdId char(6) utf8mb4_general_ci No None Change Drop More
Check all With selected: Browse Change Drop Primary Unique Index Fulltext Add to central columns
Print Propose table structure Track table Move columns Normalize
Add 1 column(s) after OrdId Go

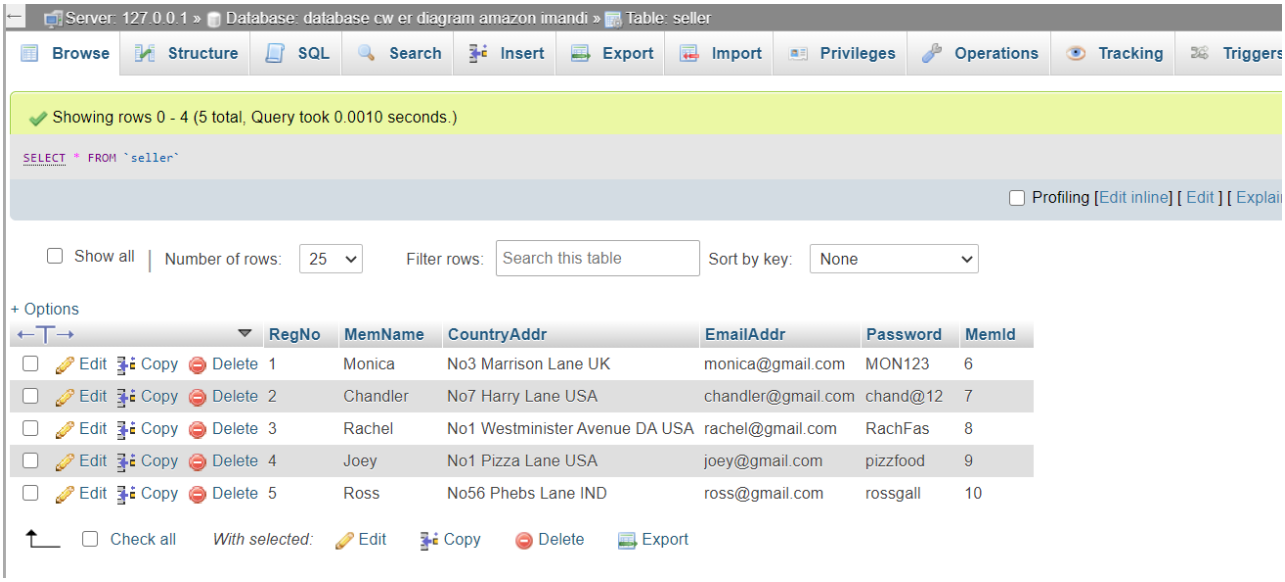
Question5

1)Inserting data to table customer

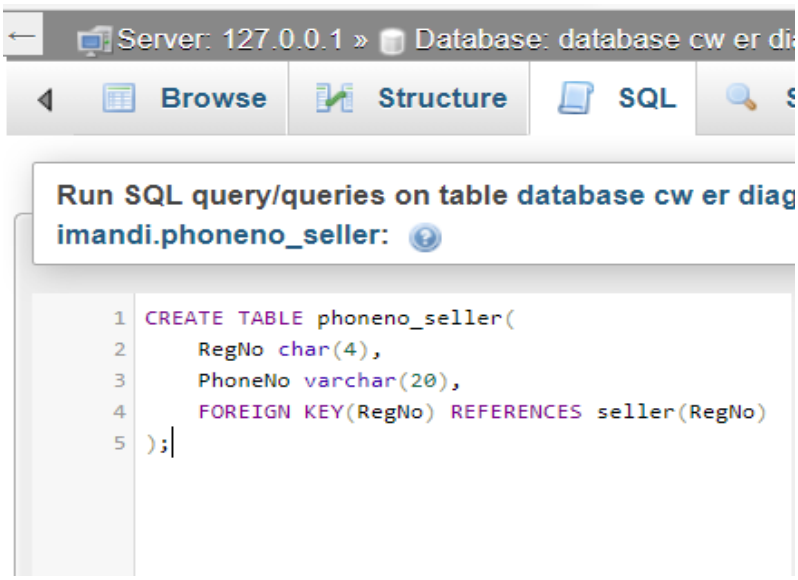


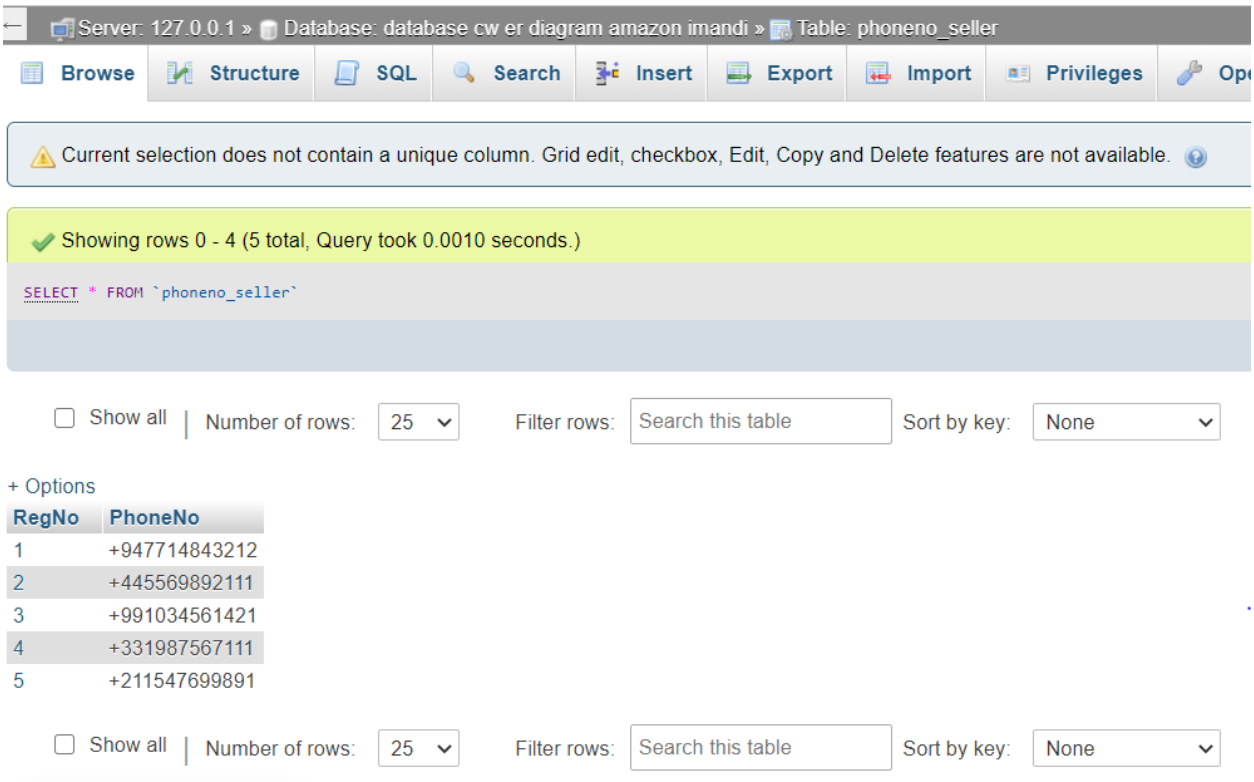


2)Inserting data to table seller

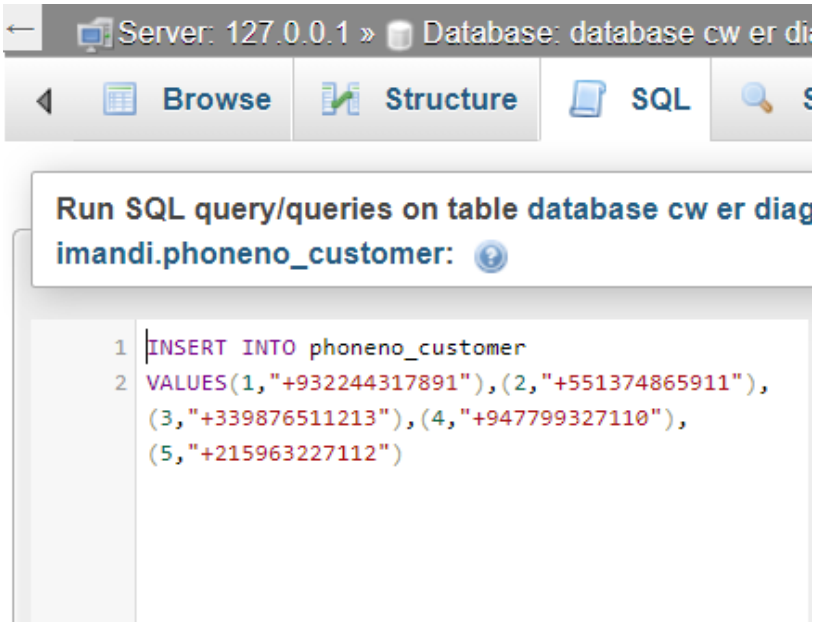


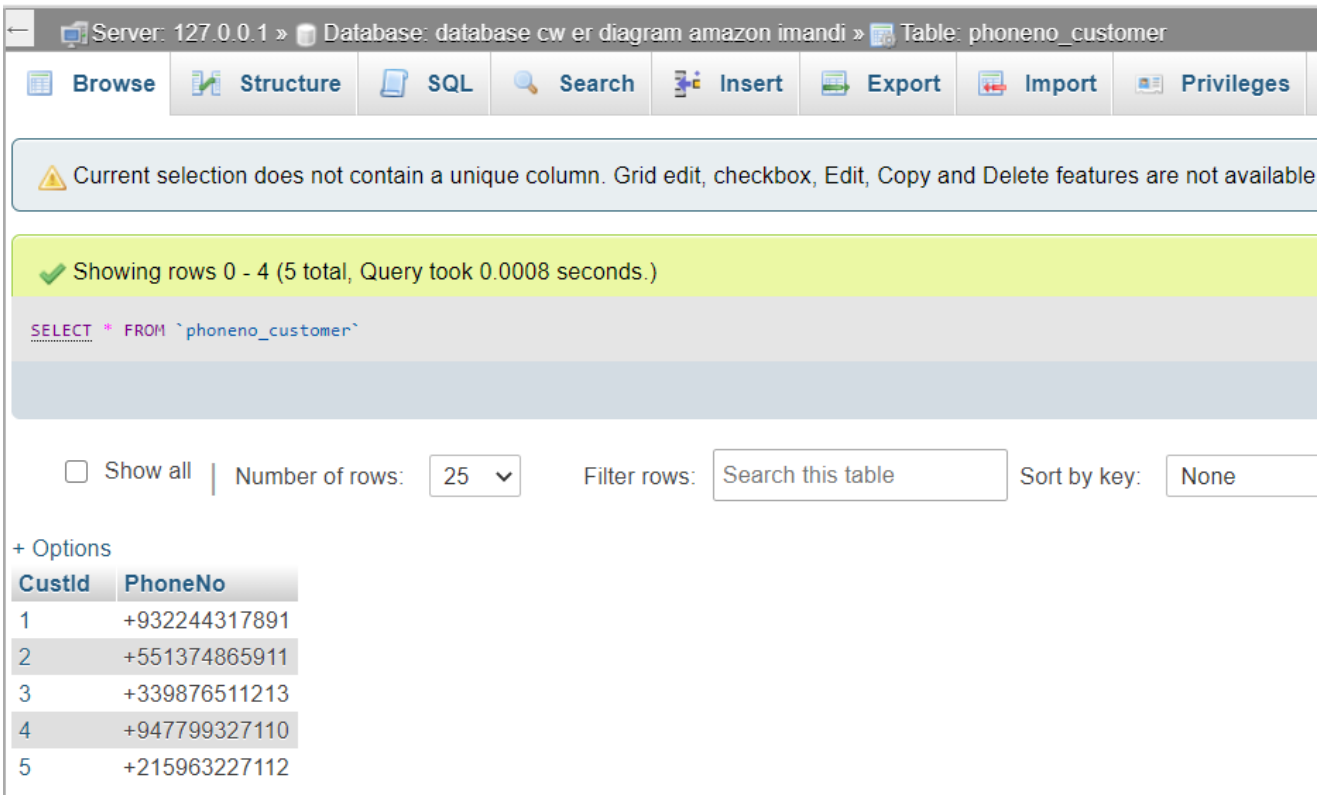
3)Inserting data to table phoneno_seller



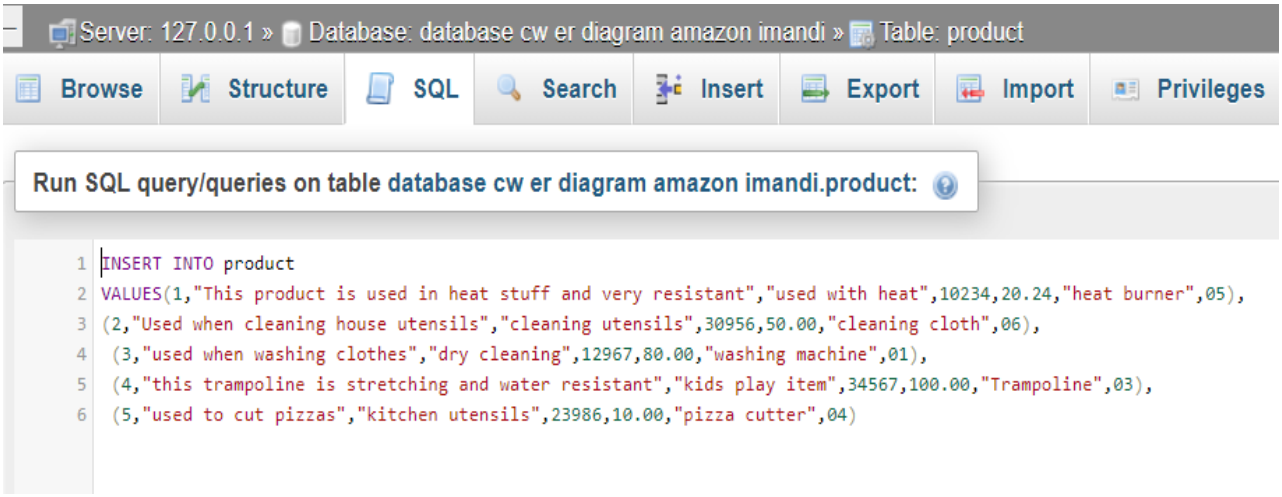


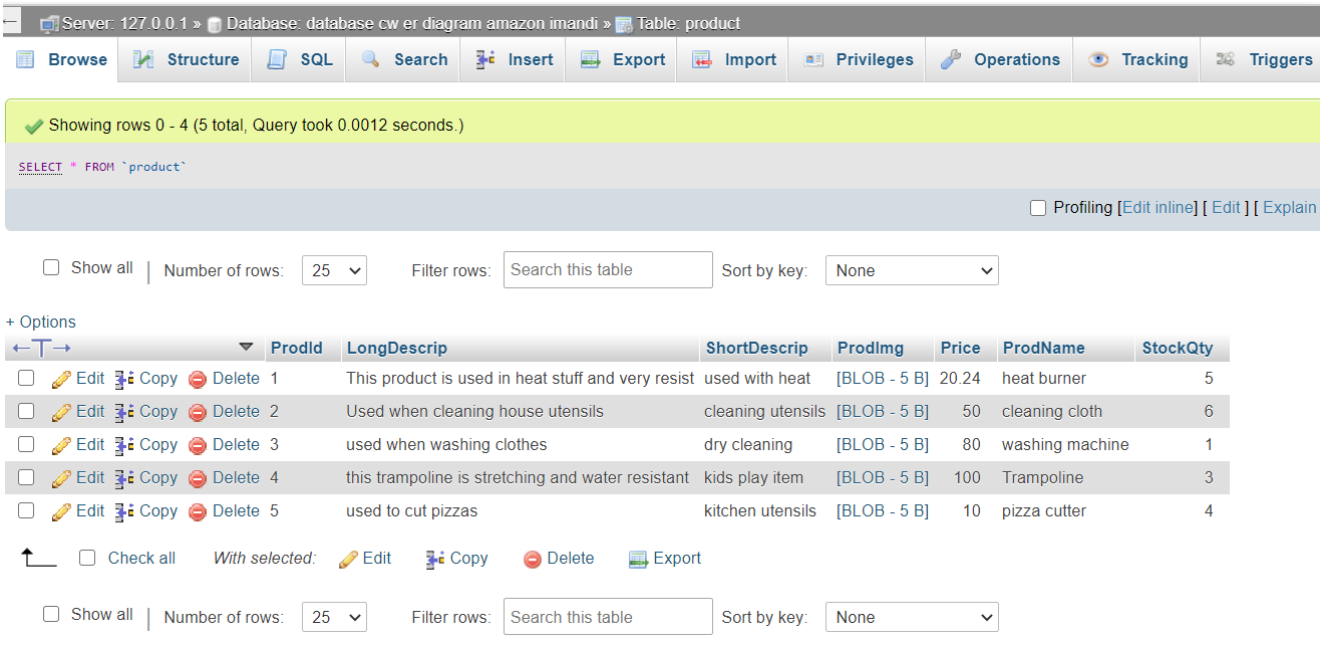
4)Inserting data to table phoneno_customer



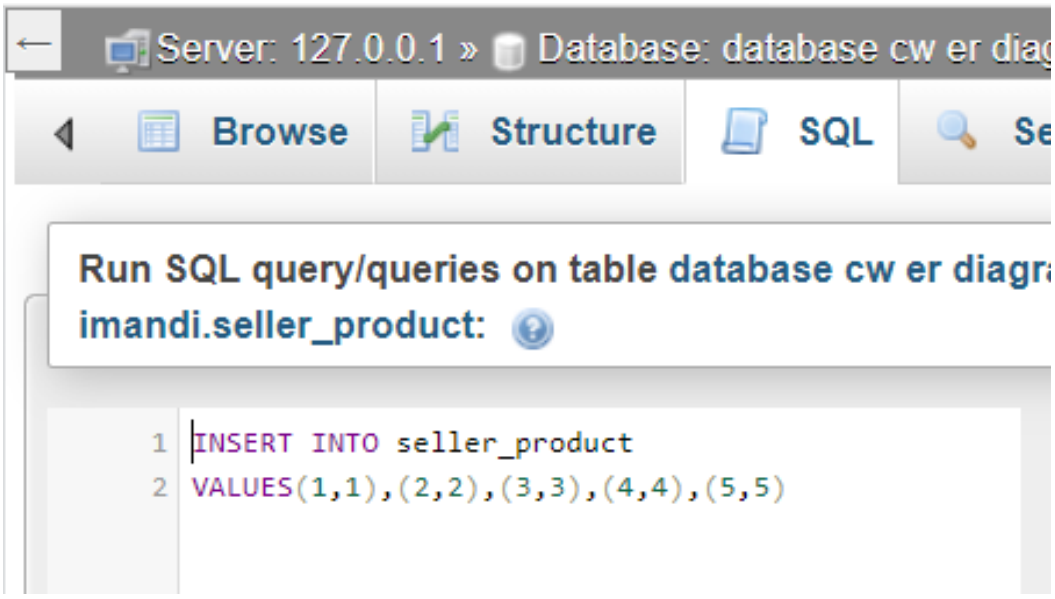


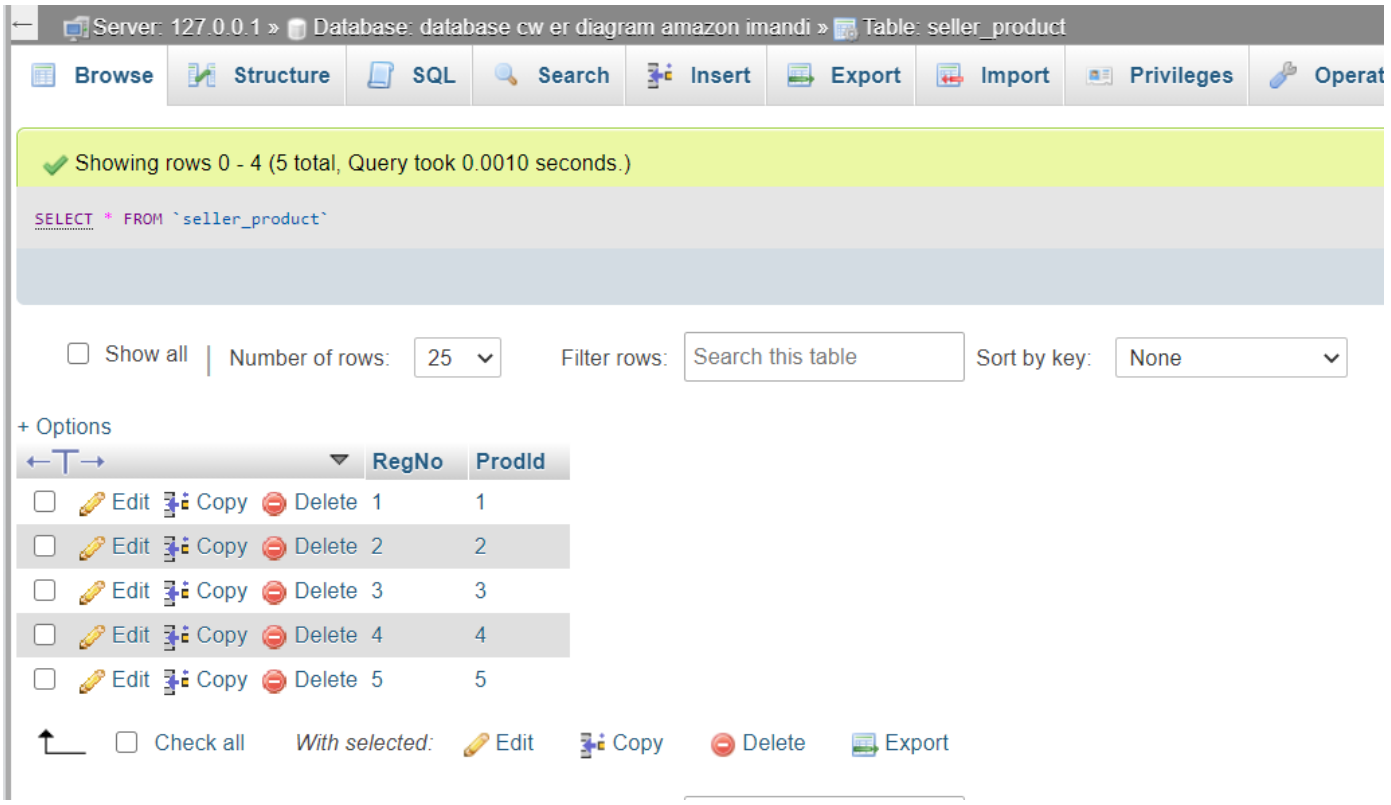
5)Inserting data to table product



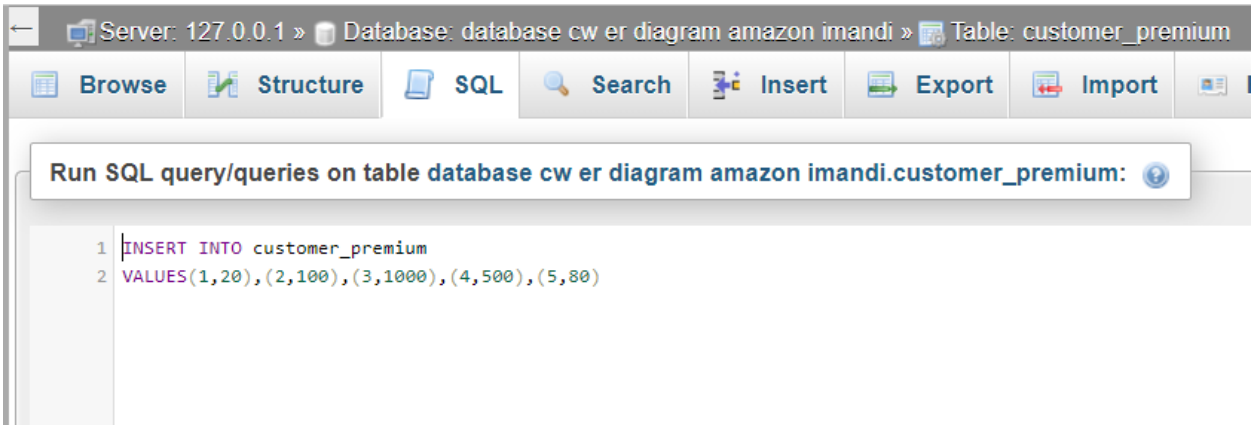


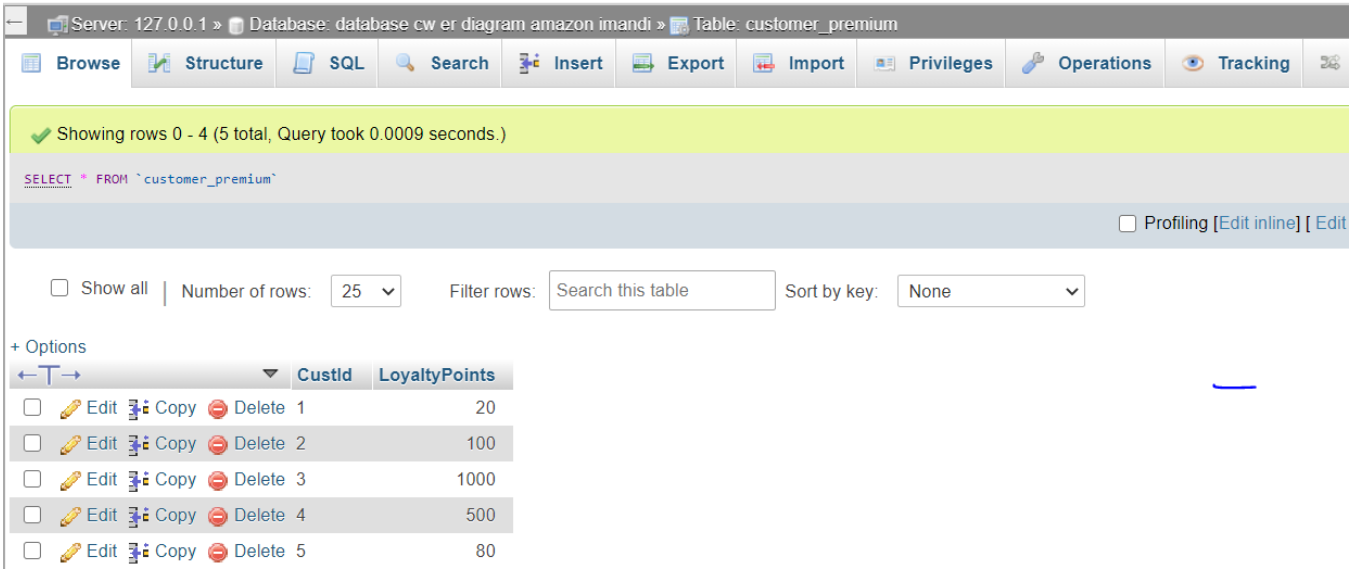
6)Inserting data to table seller_product



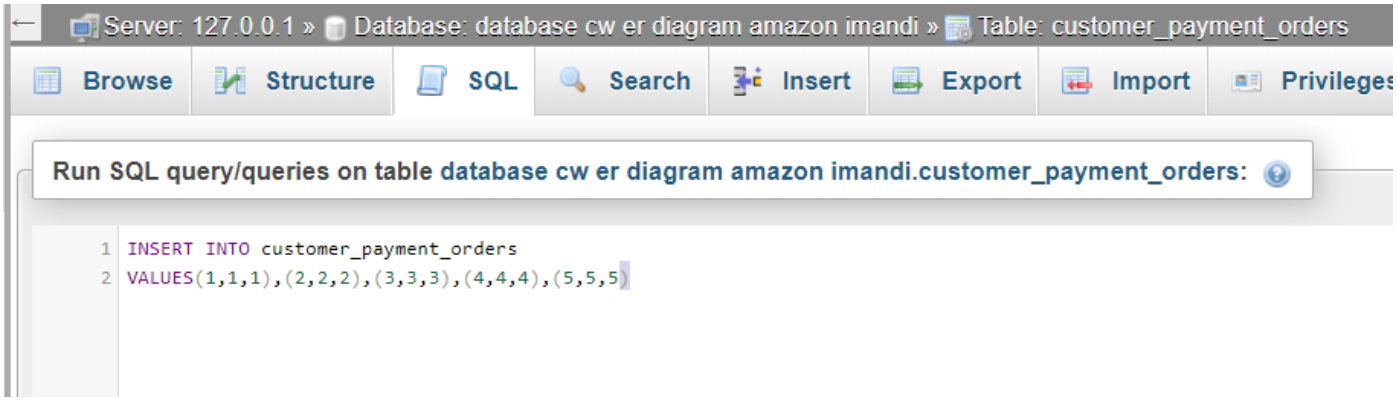


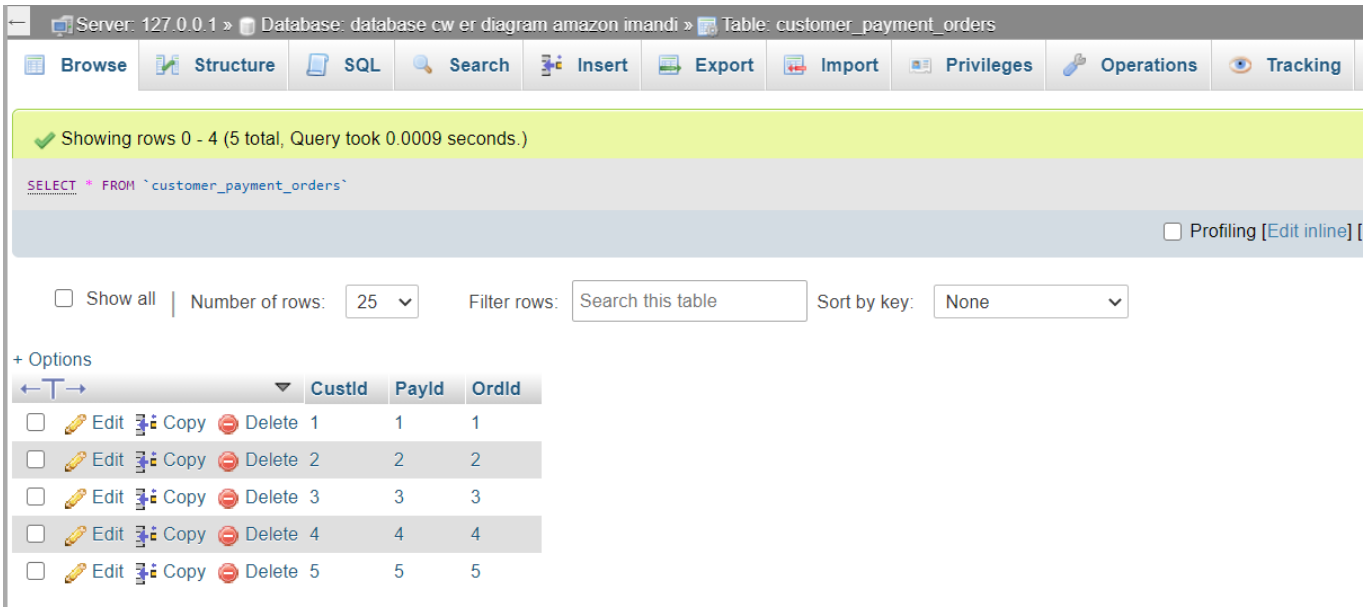
7)Inserting data to table customer_premium



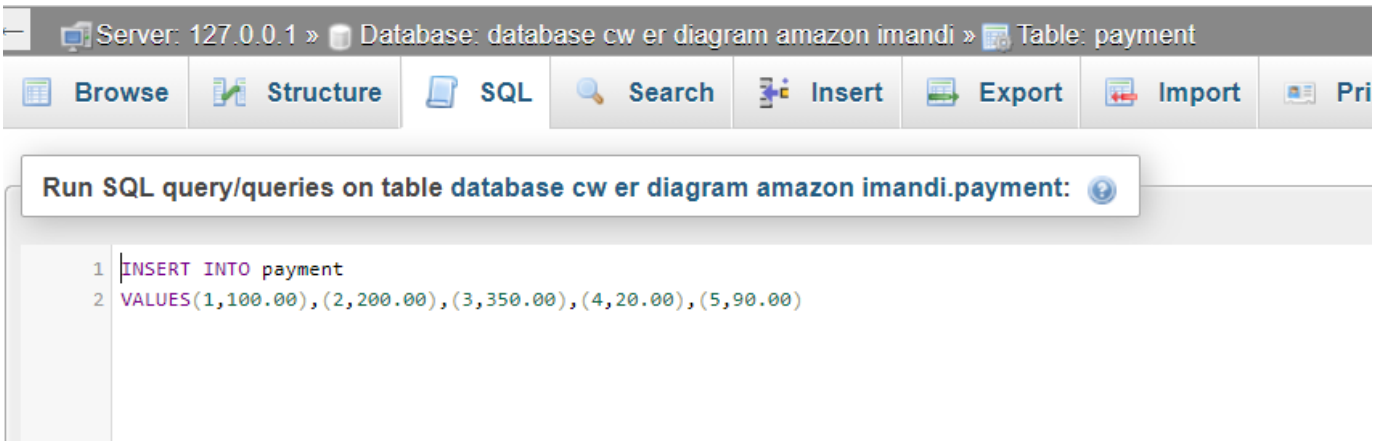


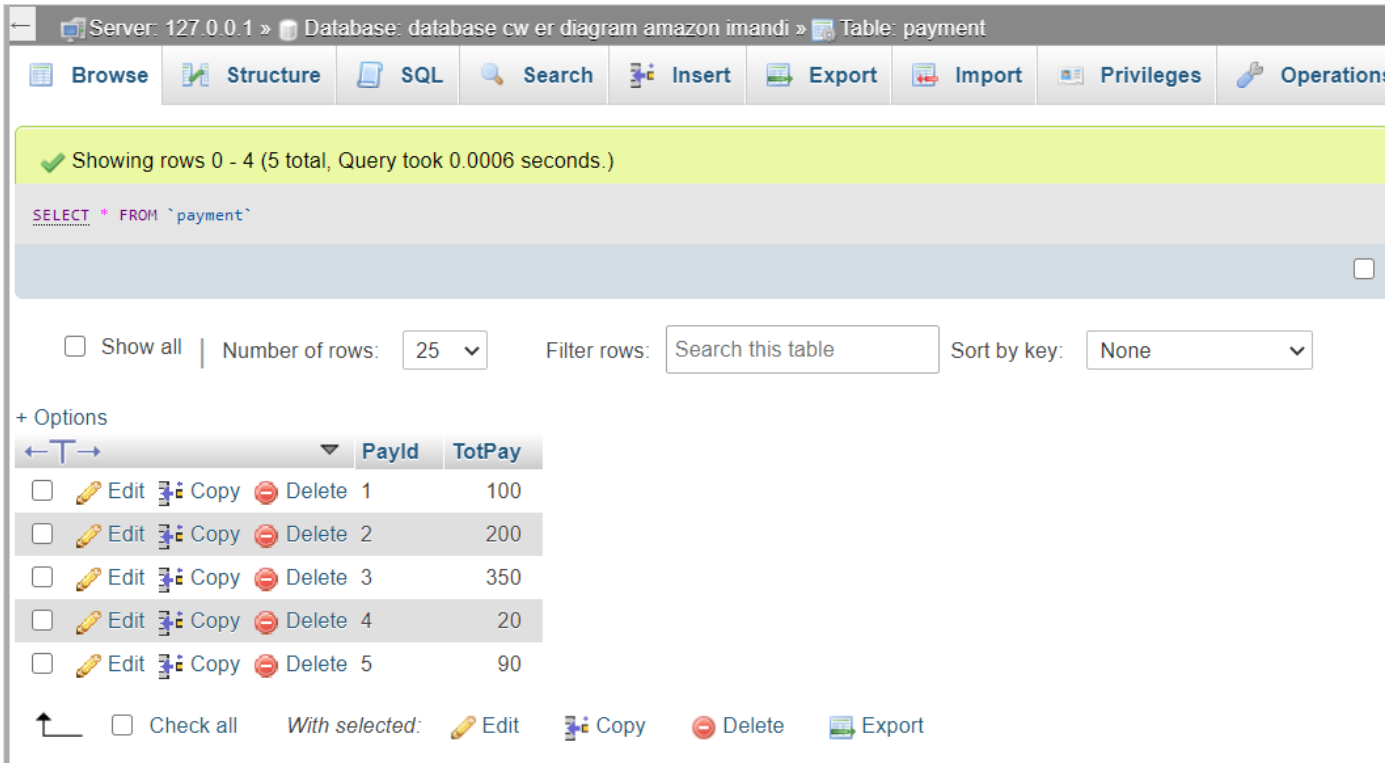
8)Inserting data to table customer_payment_order



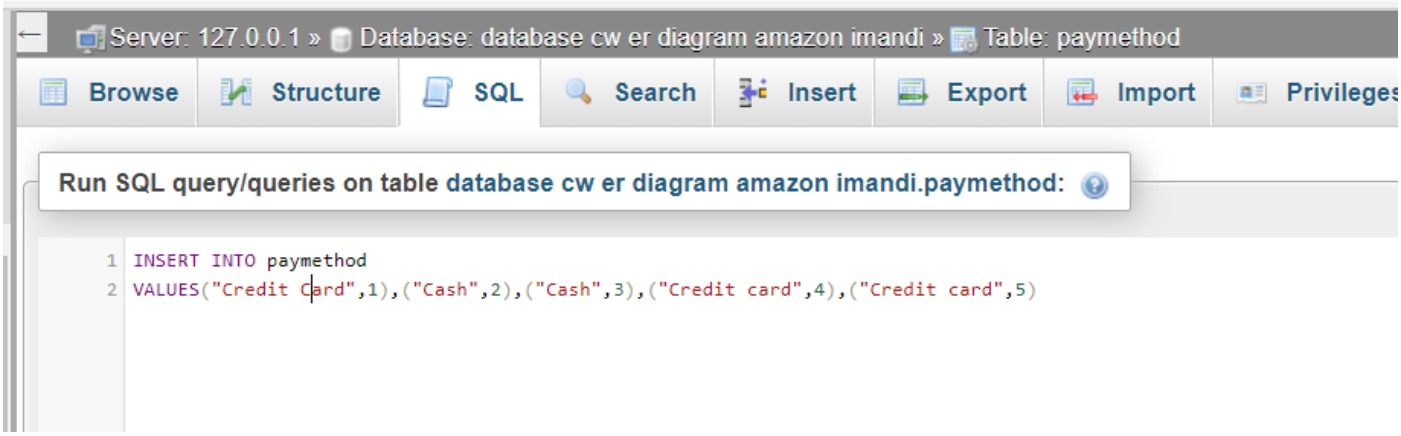


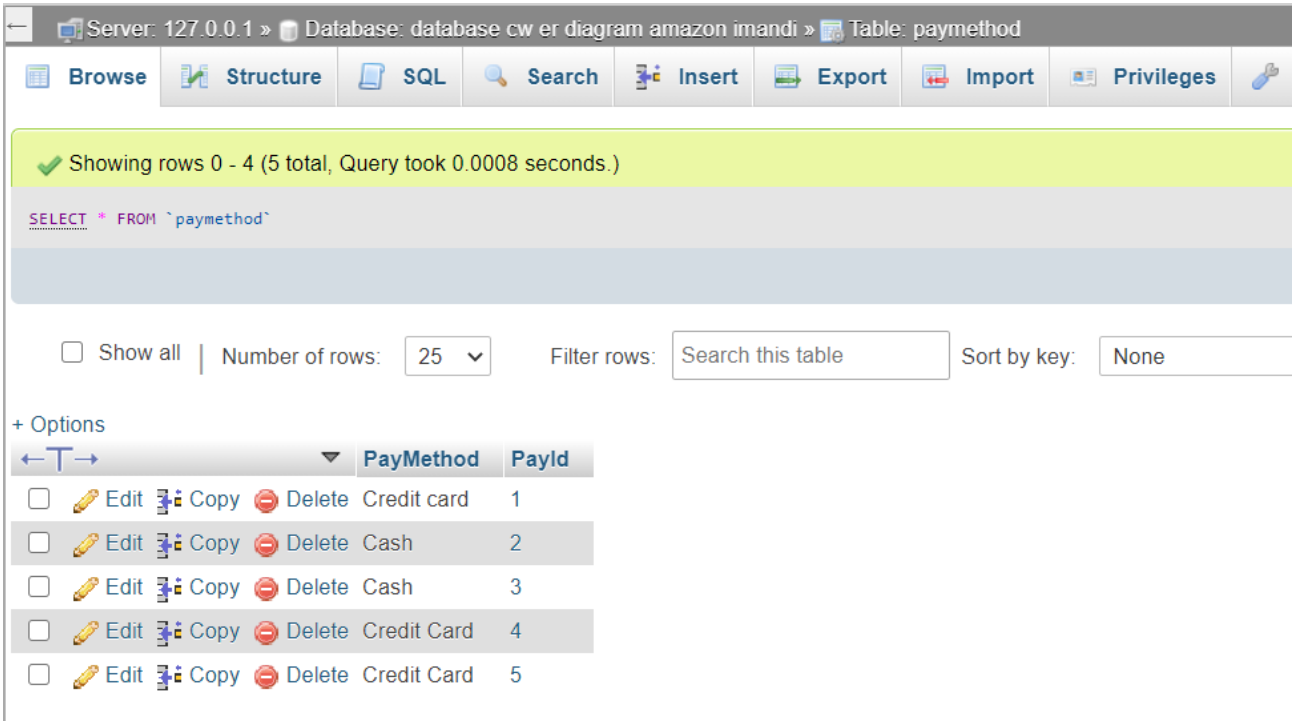
9)Inserting data to table payment



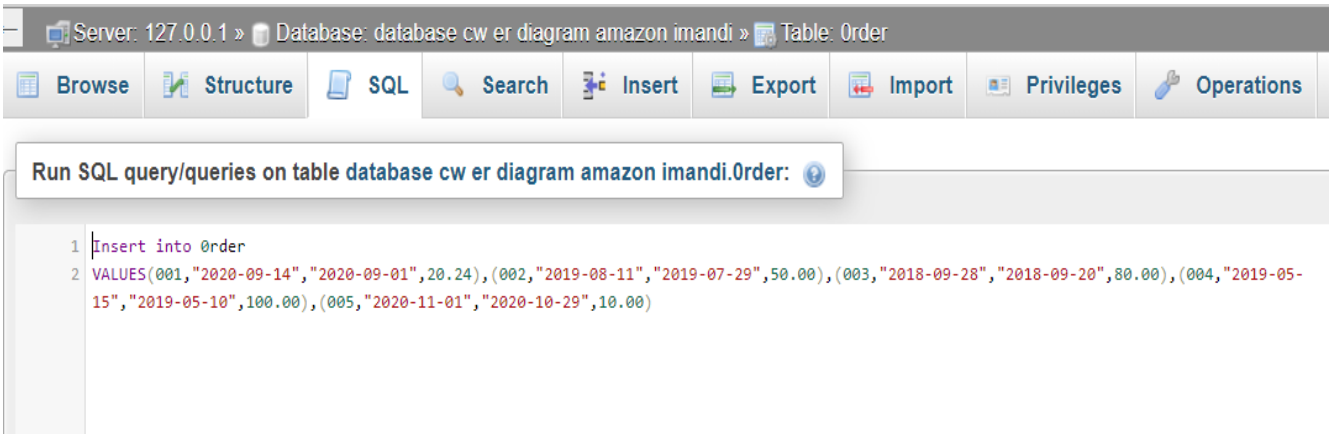


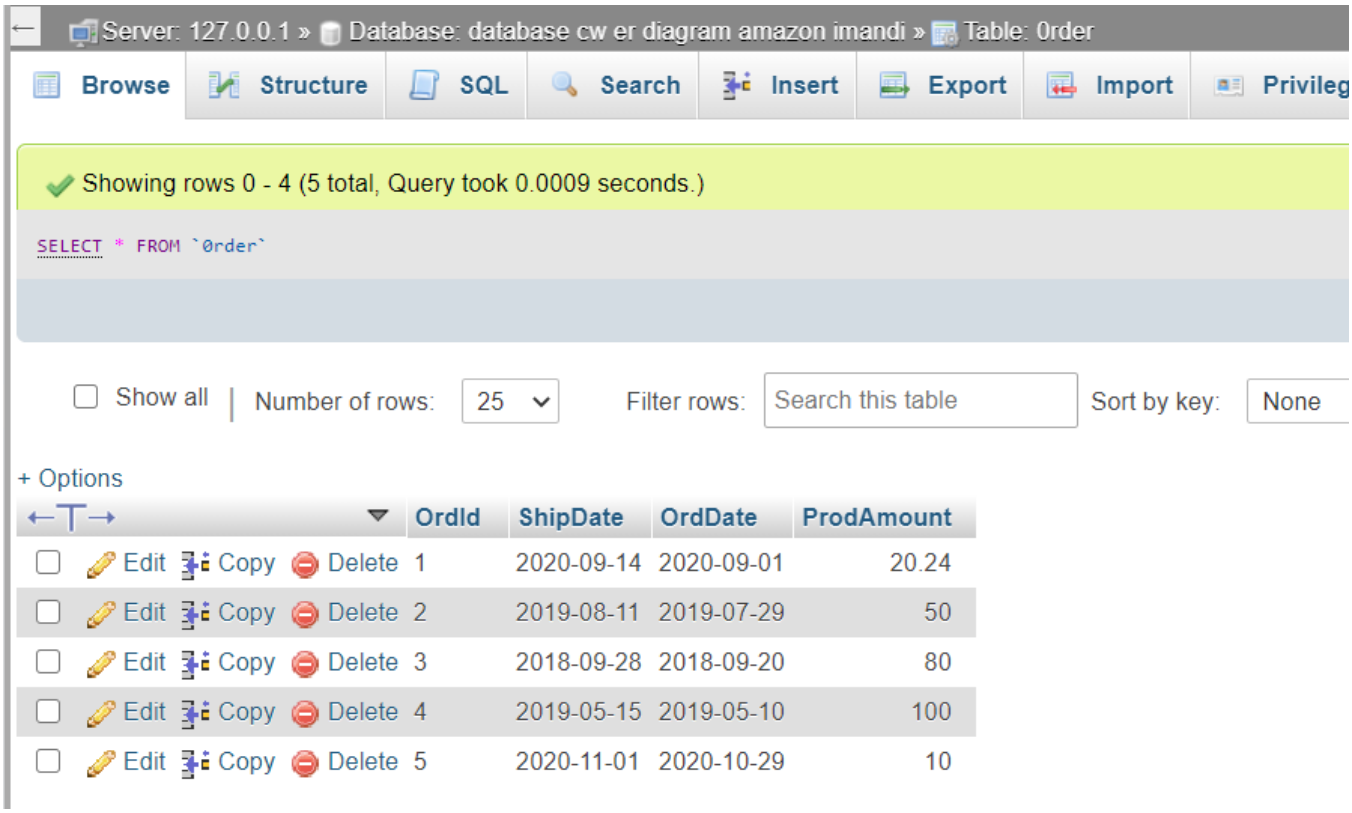
10)Inserting data to table paymethod



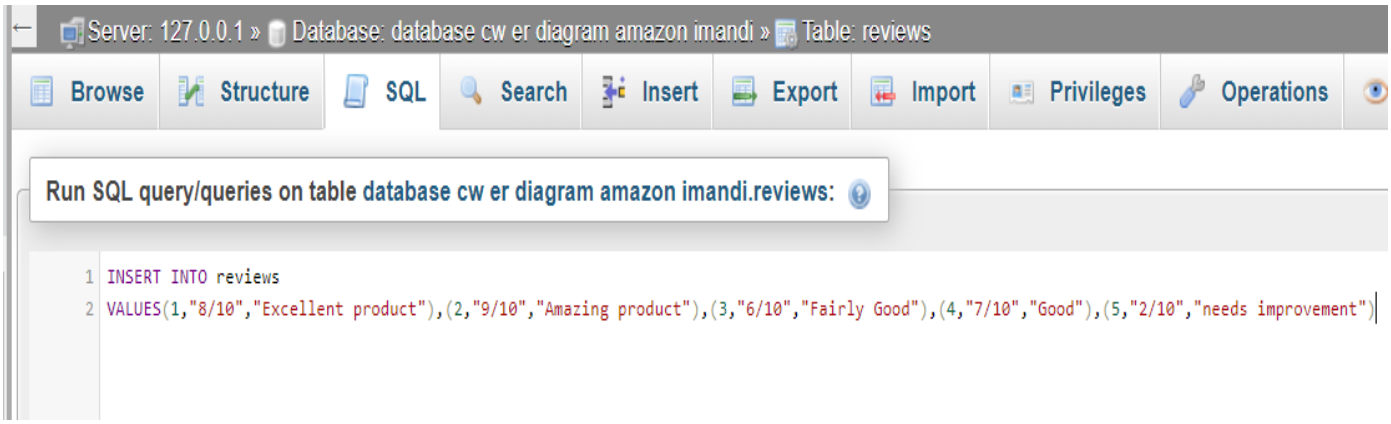


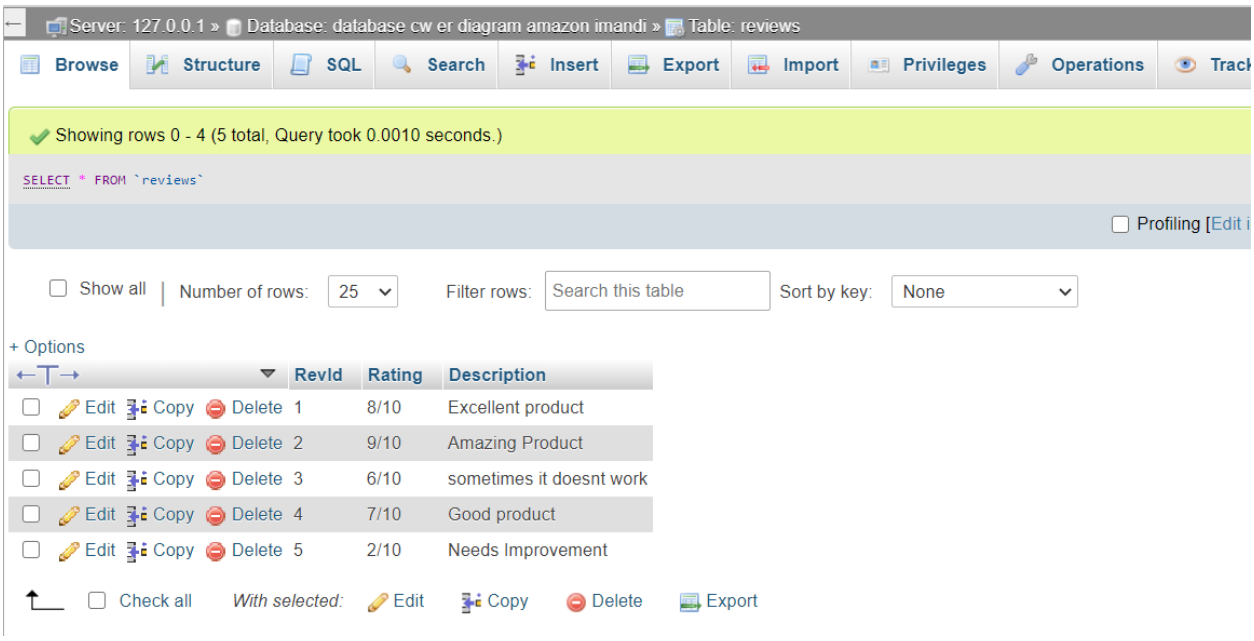
11)Inserting data to table order



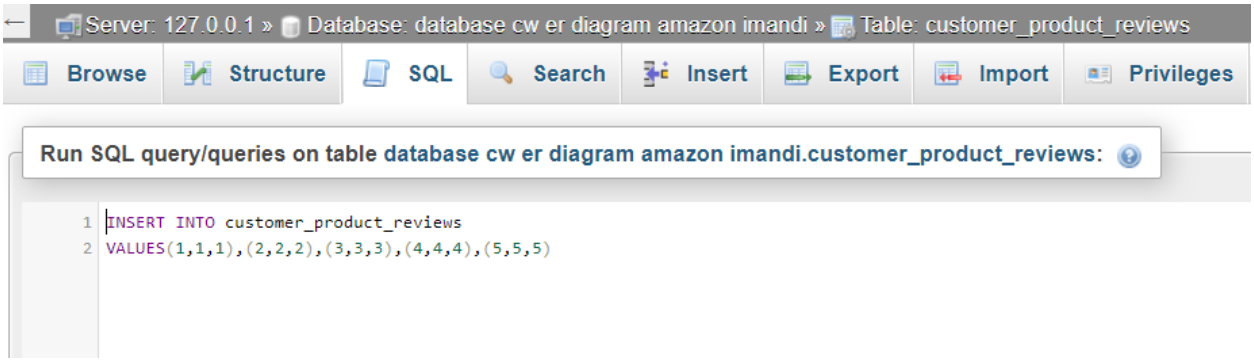


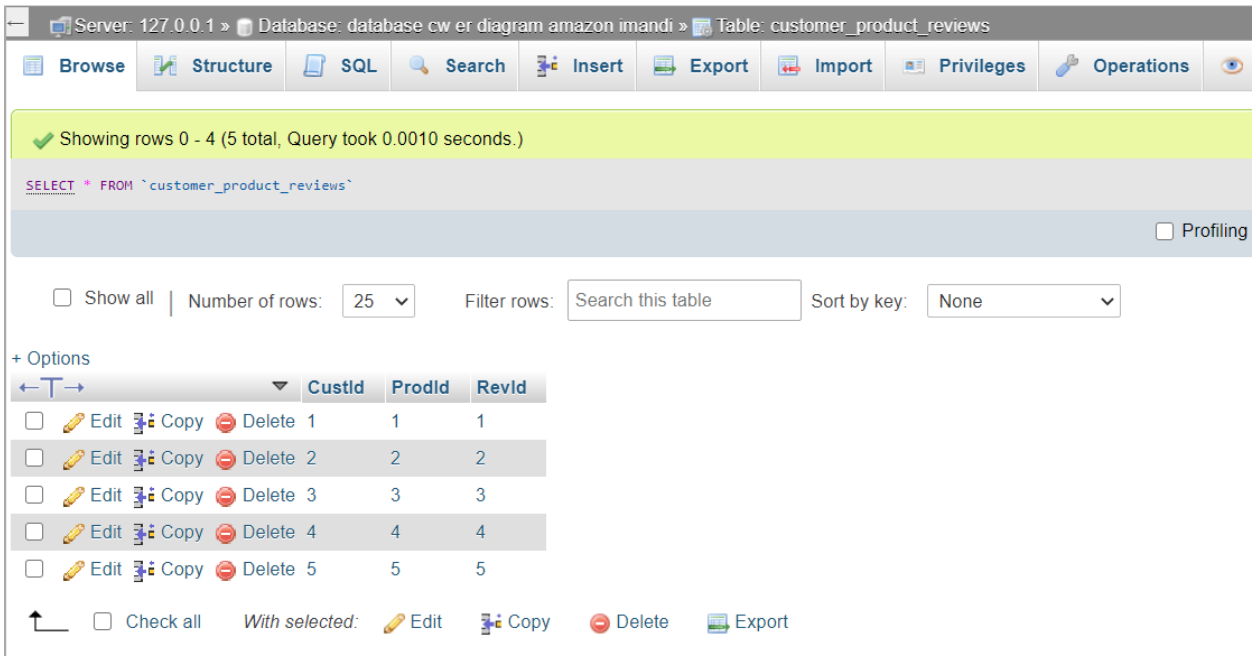
12)Inserting data to table reviews



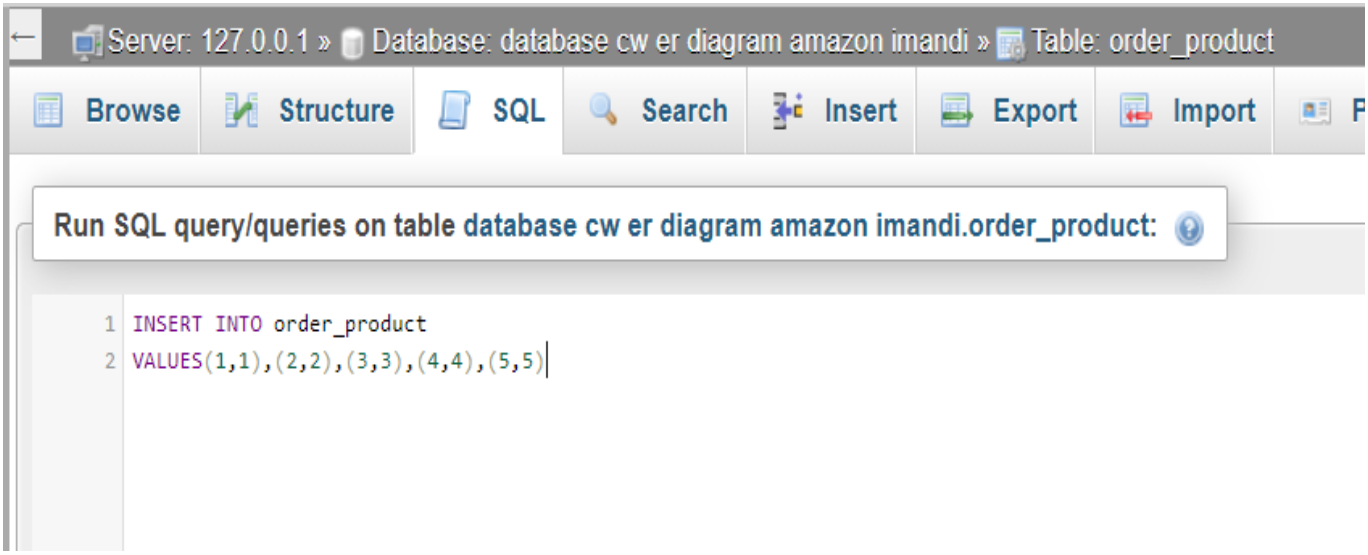


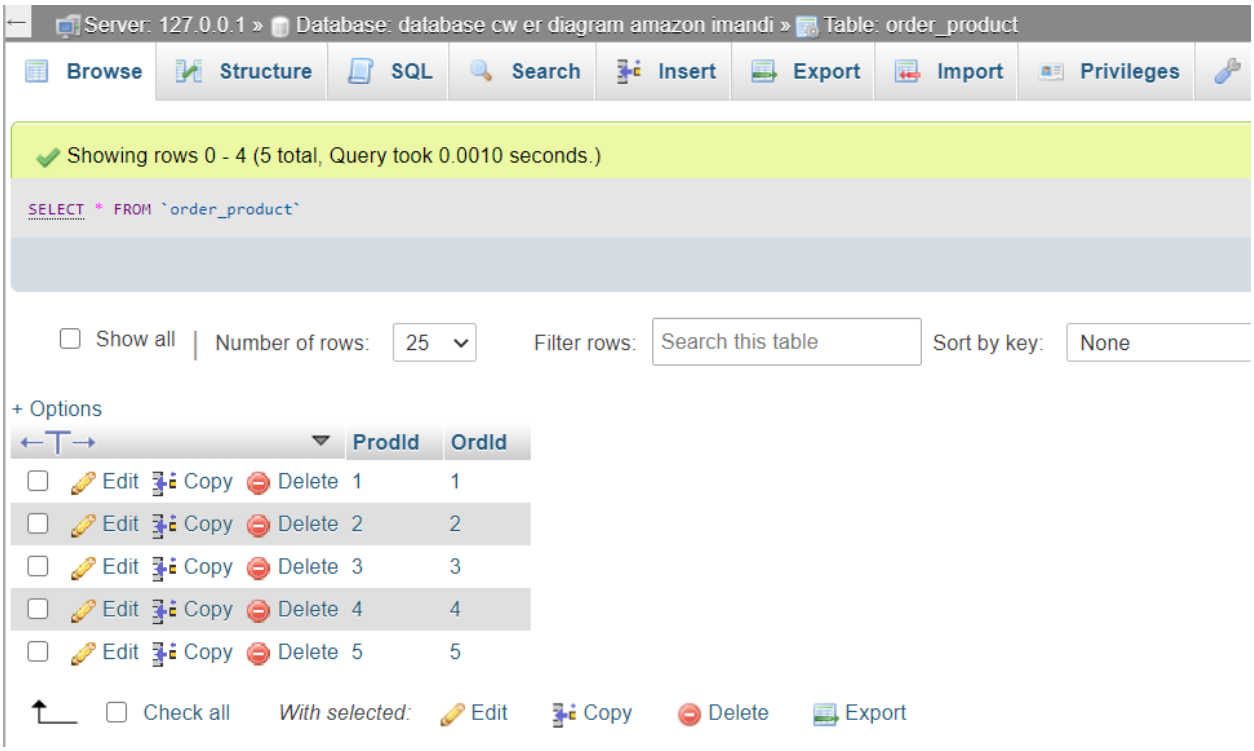
13)Inserting data to table customer_product_reviews





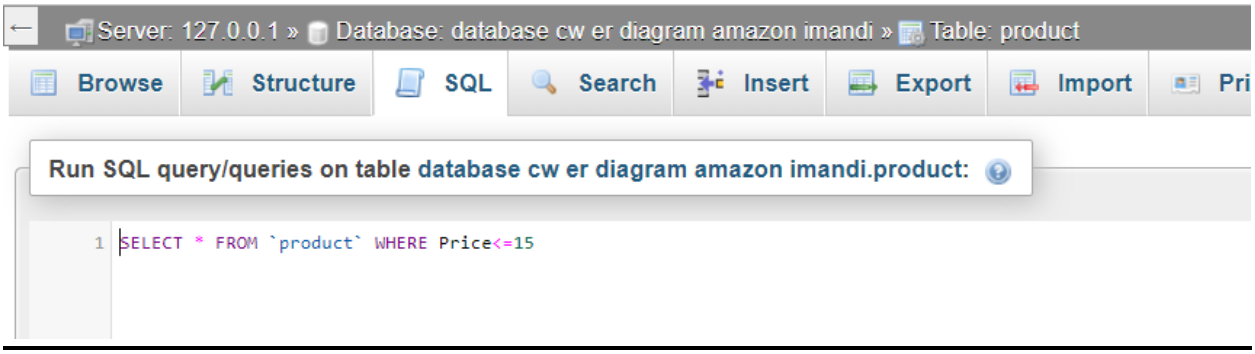
14)Inserting data to table order_product


Server: 127.0.0.1 » Database: database cw er diagram amazon imandi » Table: order_product
Browse
Structure
SQL
Search
Insert
Export
Import
Run SQL query/queries on table database cw er diagram amazon imandi.order_product:
1 INSERT INTO order_product
2 VALUES(1,1),(2,2),(3,3),(4,4),(5,5)

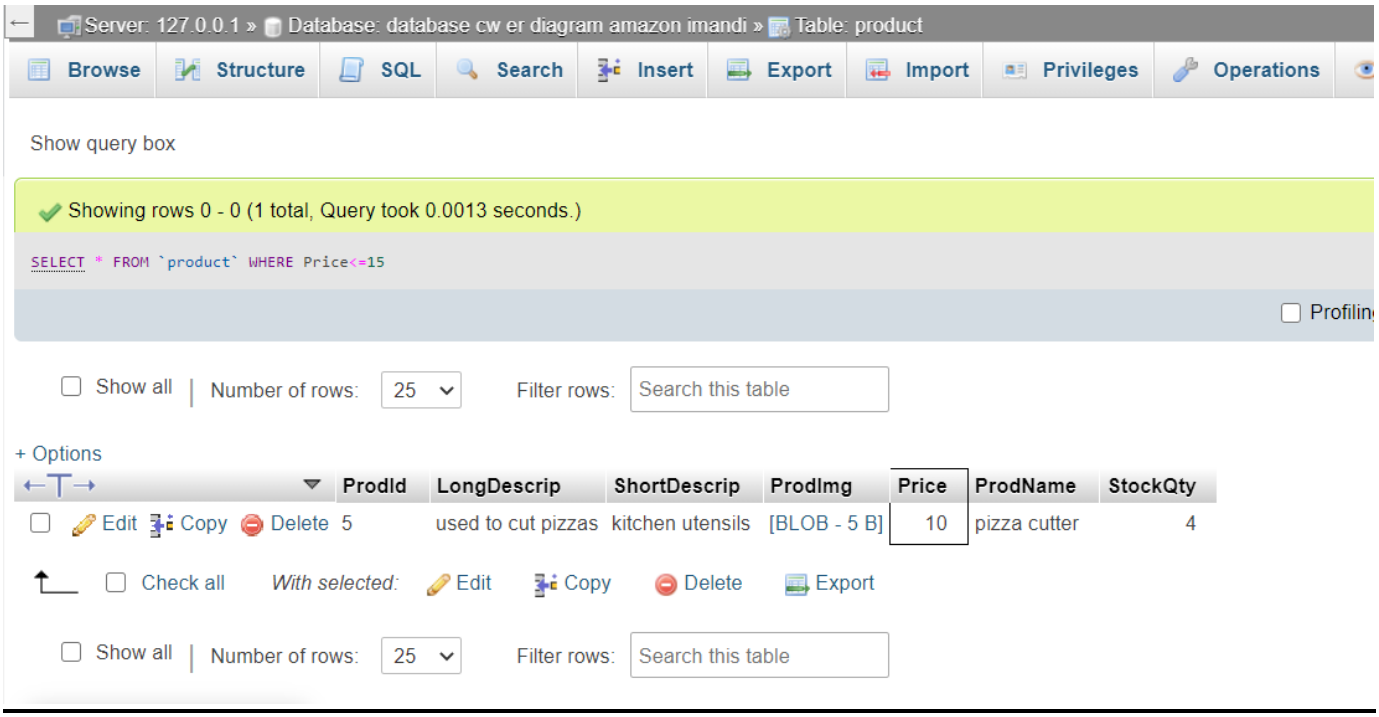

Server: 127.0.0.1 » Database: database cw er diagram amazon imandi » Table: order_product
Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Showing rows 0 - 4 (5 total, Query took 0.0010 seconds.)
SELECT * FROM `order_product`
Show all
Number of rows: 25
Filter rows: Search this table
Sort by key: None
+ Options
ProdId
OrdId
Edit Copy Delete 1 1
Edit Copy Delete 2 2
Edit Copy Delete 3 3
Edit Copy Delete 4 4
Edit Copy Delete 5 5
Check all
With selected:
Edit
Copy
Delete
Export

Question 6

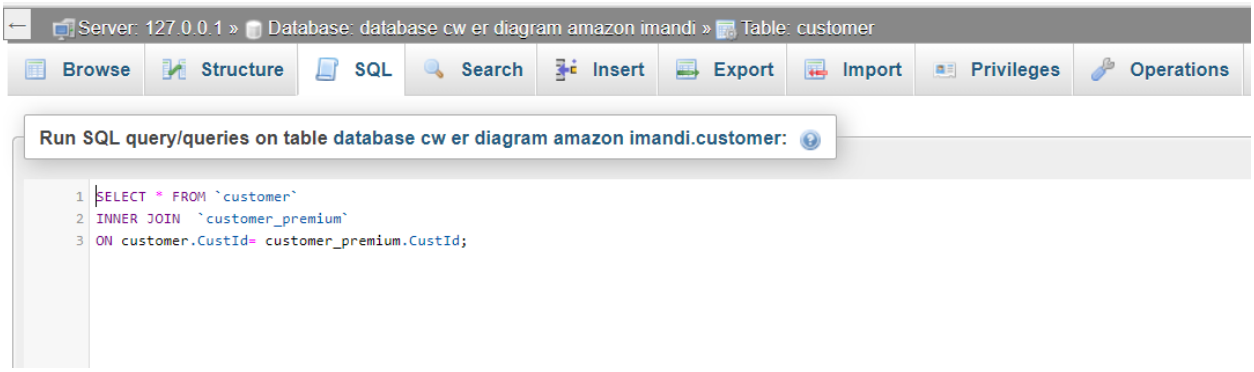
Part 1)



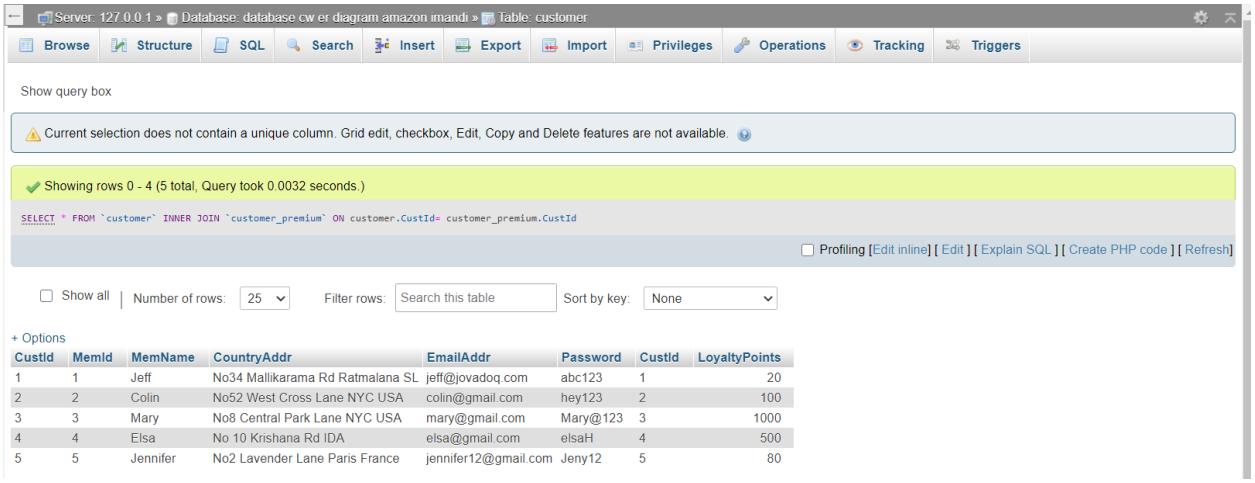
Output:



Part 2)

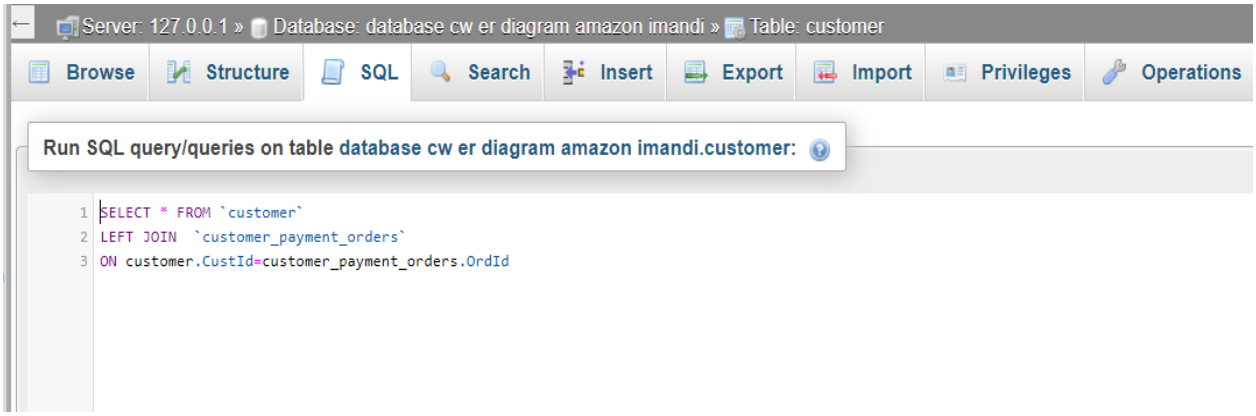


Output:

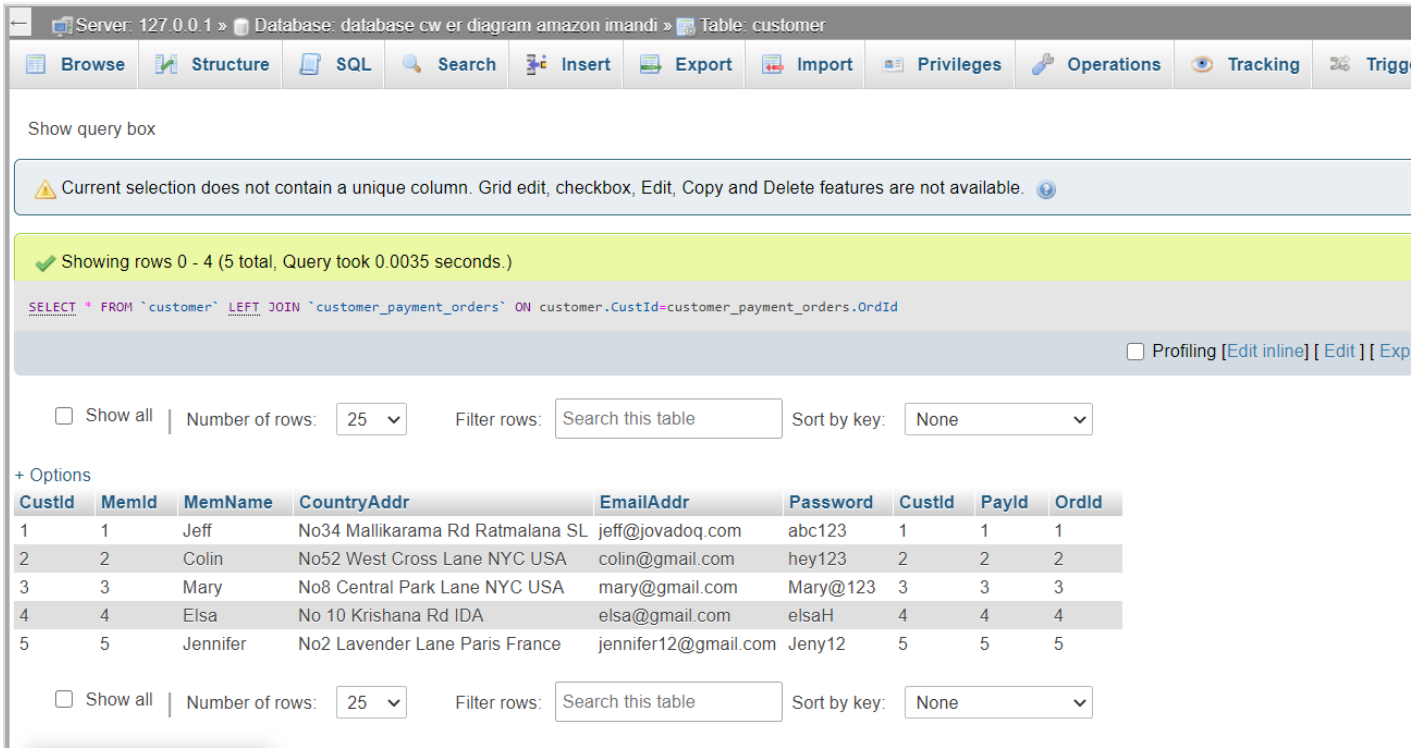


CustId	MemId	MemName	CountryAddr	EmailAddr	Password	CustId	LoyaltyPoints
1	1	Jeff	No34 Mallikarama Rd Ratmalana SL	jeff@jovadoq.com	abc123	1	20
2	2	Colin	No52 West Cross Lane NYC USA	colin@gmail.com	hey123	2	100
3	3	Mary	No8 Central Park Lane NYC USA	mary@gmail.com	Mary@123	3	1000
4	4	Elsa	No 10 Krishana Rd IDA	elsa@gmail.com	elsaH	4	500
5	5	Jennifer	No2 Lavender Lane Paris France	jennifer12@gmail.com	Jeny12	5	80

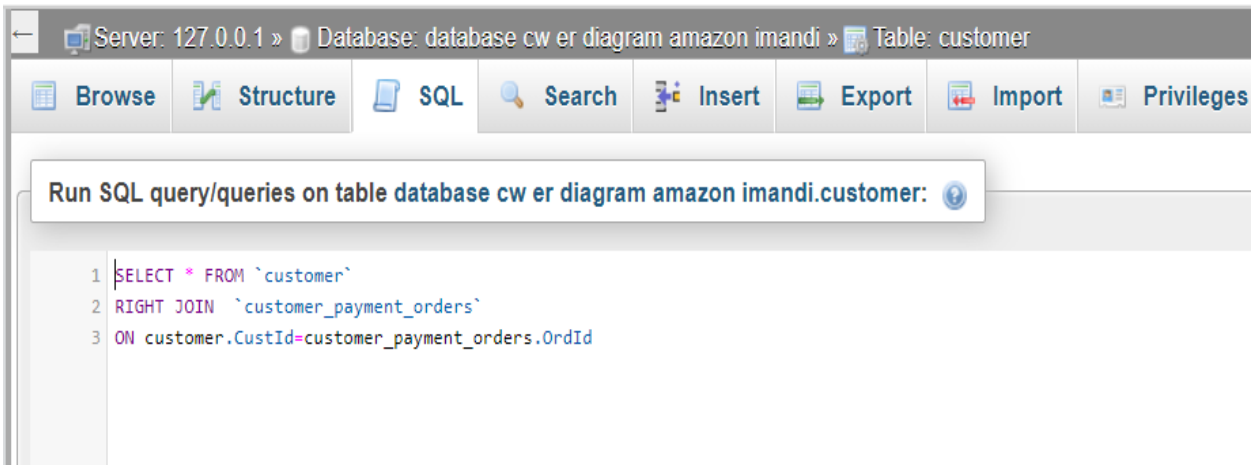
Part 3) for left join



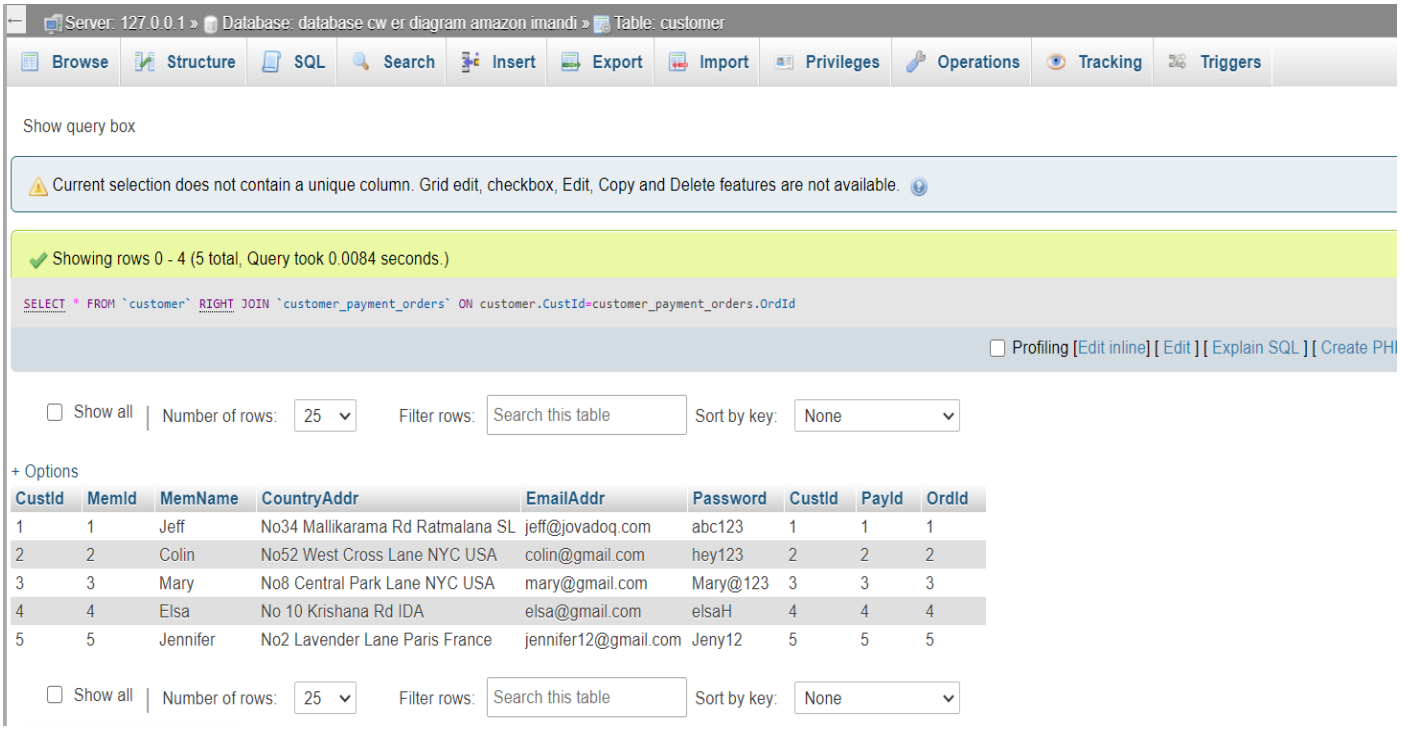
Output:



For Right Join

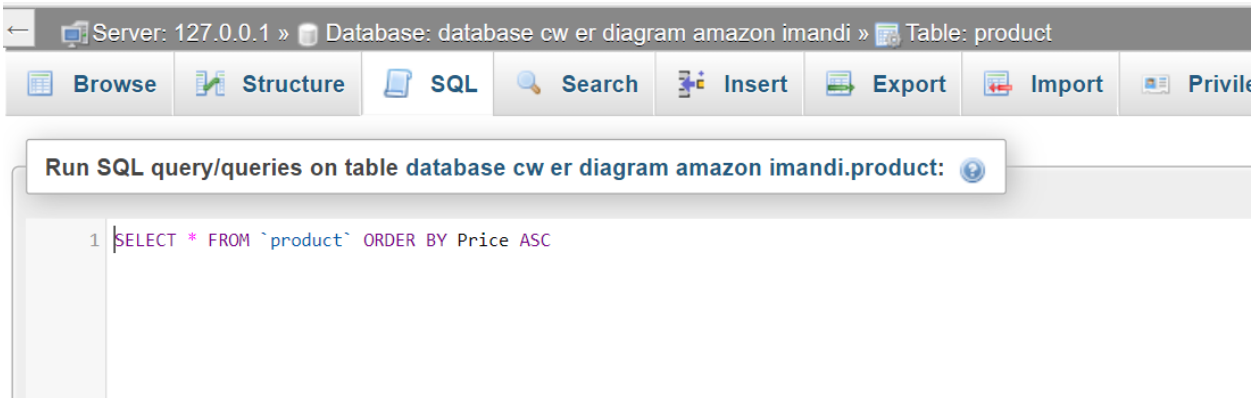

Server: 127.0.0.1 » Database: database cw er diagram amazon imandi » Table: customer
Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Run SQL query/queries on table database cw er diagram amazon imandi.customer:
SELECT * FROM `customer`
RIGHT JOIN `customer_payment_orders`
ON customer.CustId=customer_payment_orders.OrdId

Output:

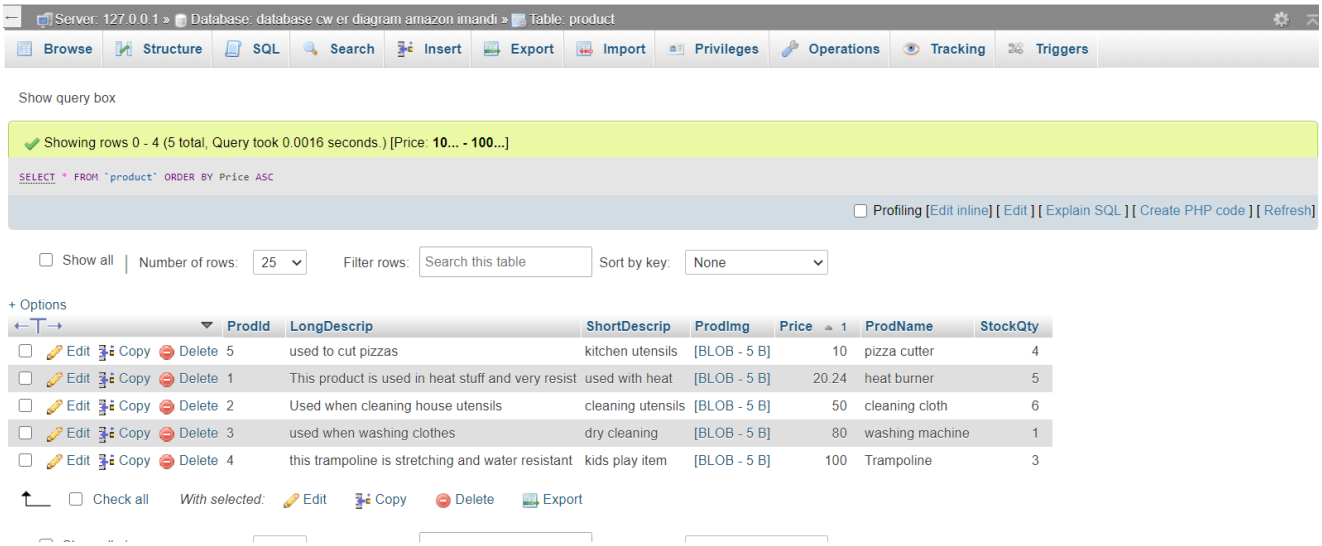

Server: 127.0.0.1 » Database: database cw er diagram amazon imandi » Table: customer
Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Tracking
Triggers
Show query box
Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.
Showing rows 0 - 4 (5 total, Query took 0.0084 seconds.)
SELECT * FROM `customer` RIGHT JOIN `customer_payment_orders` ON customer.CustId=customer_payment_orders.OrdId
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHI
Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None
+ Options
CustId MemId MemName CountryAddr EmailAddr Password CustId PayId OrdId
1 1 Jeff No34 Mallikarama Rd Ratmalana SL jeff@jovadoq.com abc123 1 1 1
2 2 Colin No52 West Cross Lane NYC USA colin@gmail.com hey123 2 2 2
3 3 Mary No8 Central Park Lane NYC USA mary@gmail.com Mary@123 3 3 3
4 4 Elsa No 10 Krishana Rd IDA elsa@gmail.com elsaH 4 4 4
5 5 Jennifer No2 Lavender Lane Paris France jennifer12@gmail.com Jeny12 5 5 5
Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

Part 4)

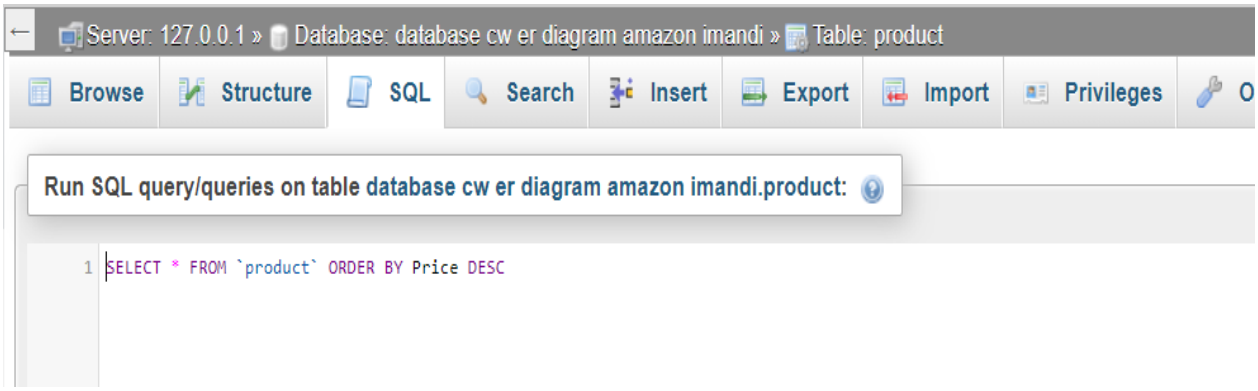
Ascending order



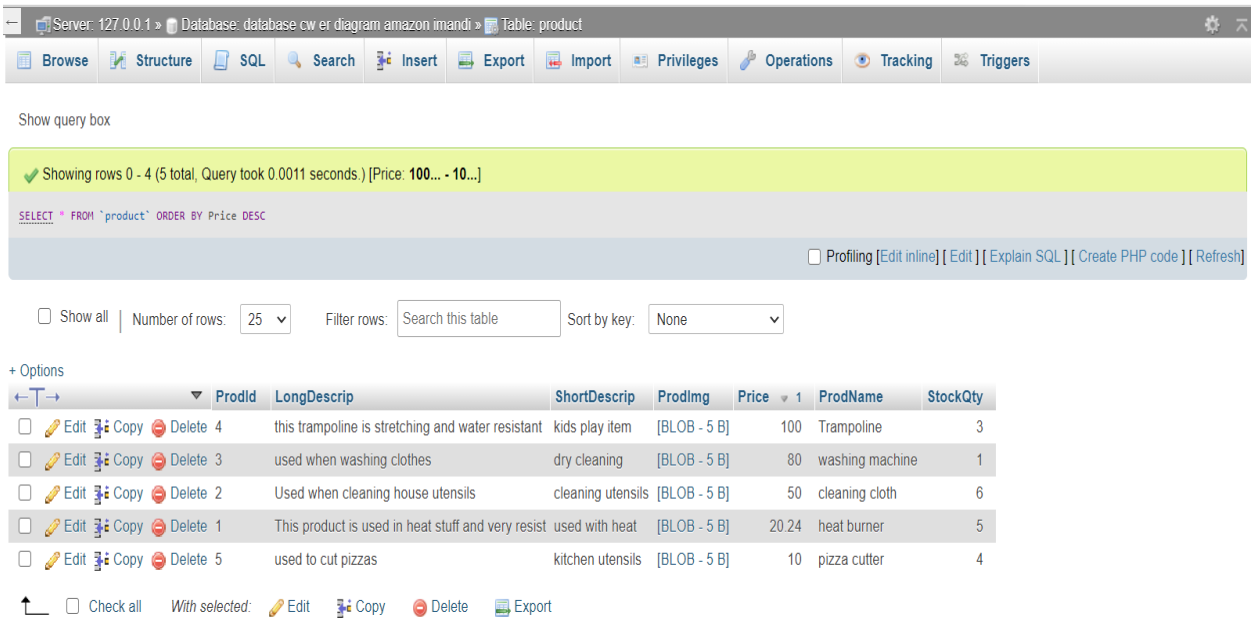
Output :



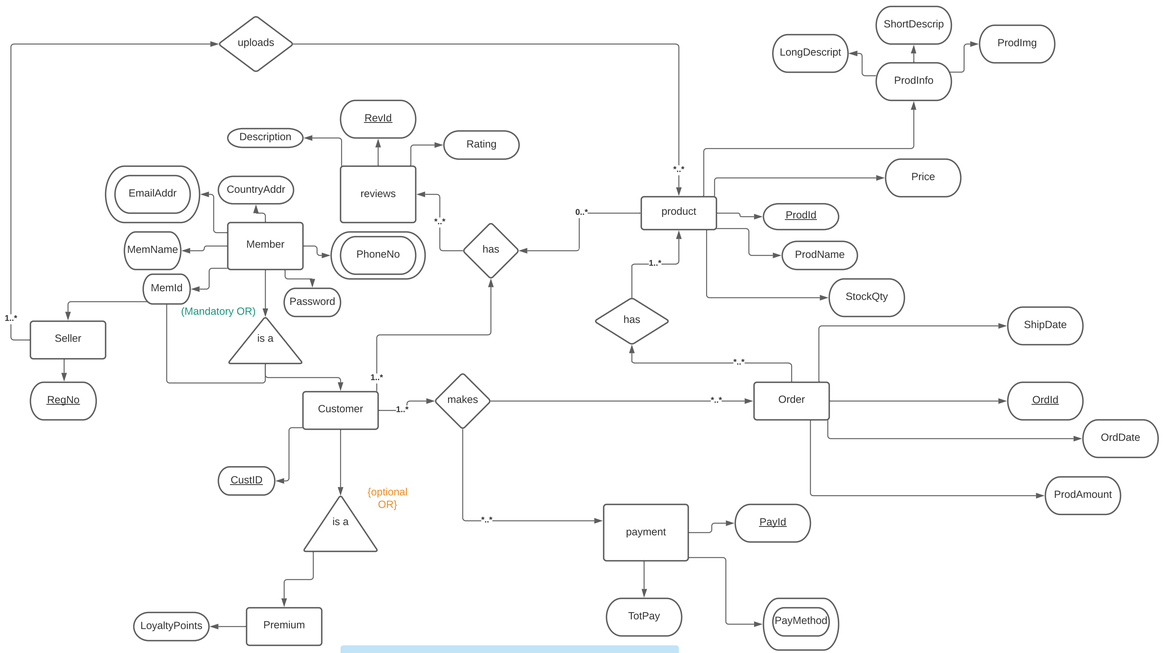
Descending Order



Output:



DATABASE CW ER DIAGRAM AMAZON(Question 1)



ASSUMPTIONS
-other customers can see which customer has given a certain review on which product
-Member has to be either a customer or seller