PROGRAM 3

Consider the following schema:

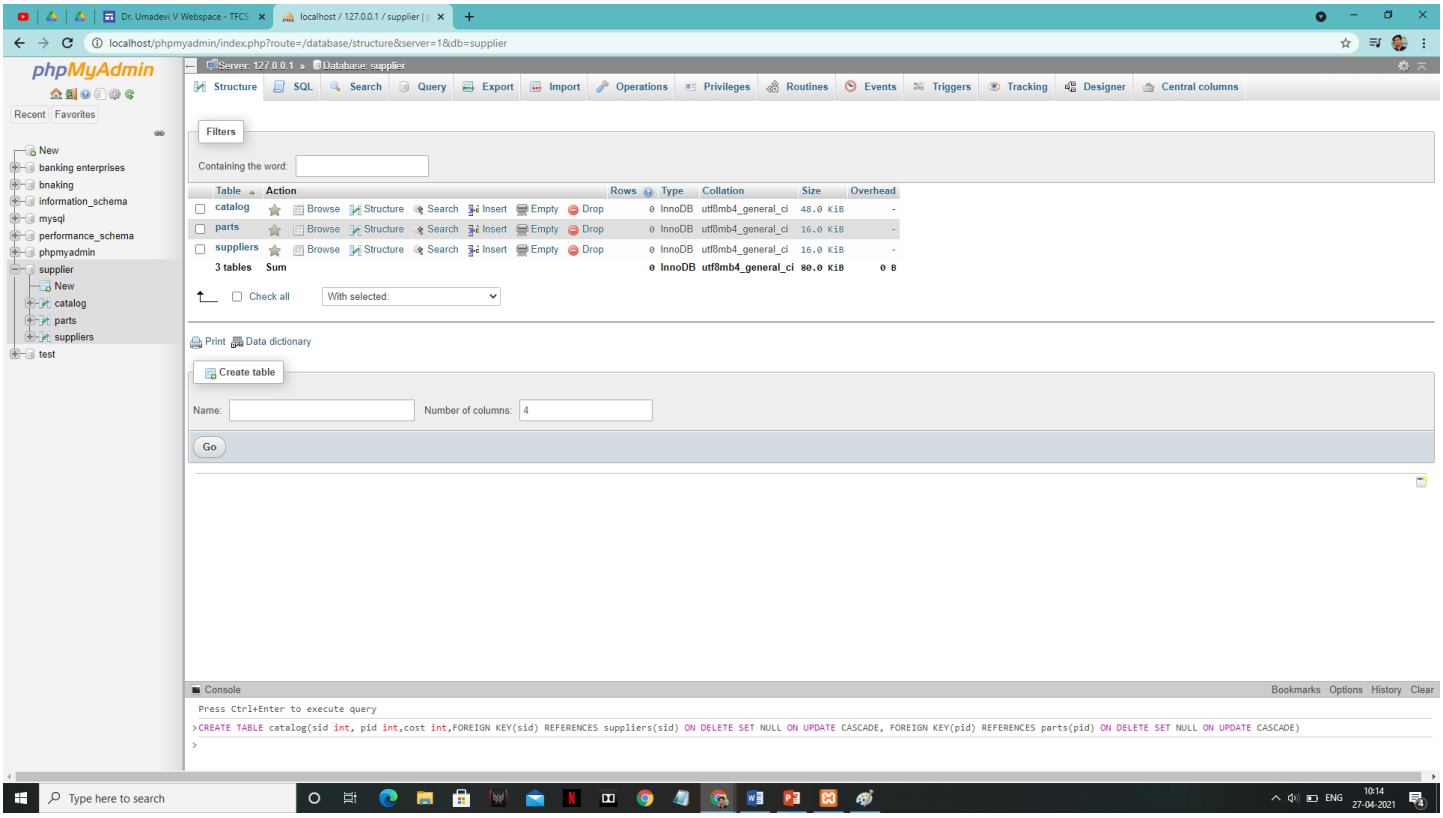
SUPPLIERS (sid: integer, sname: string, address: string)

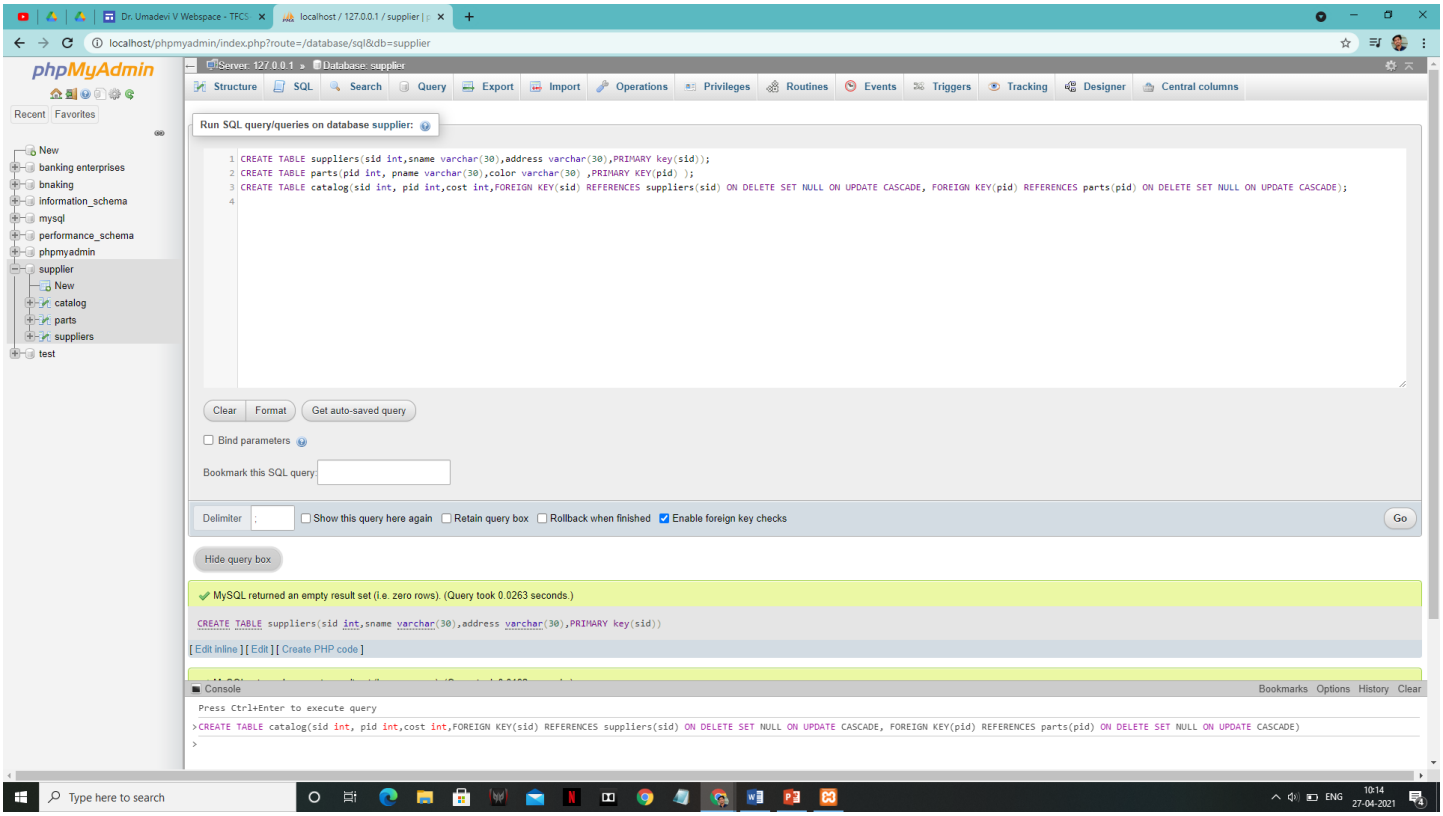
PARTS (pid: integer, pname: string, color: string)

CATALOG (sid: integer, pid: integer, cost: real)

The Catalog relation lists the prices charged for parts by Suppliers. Write the following queries in SQL:

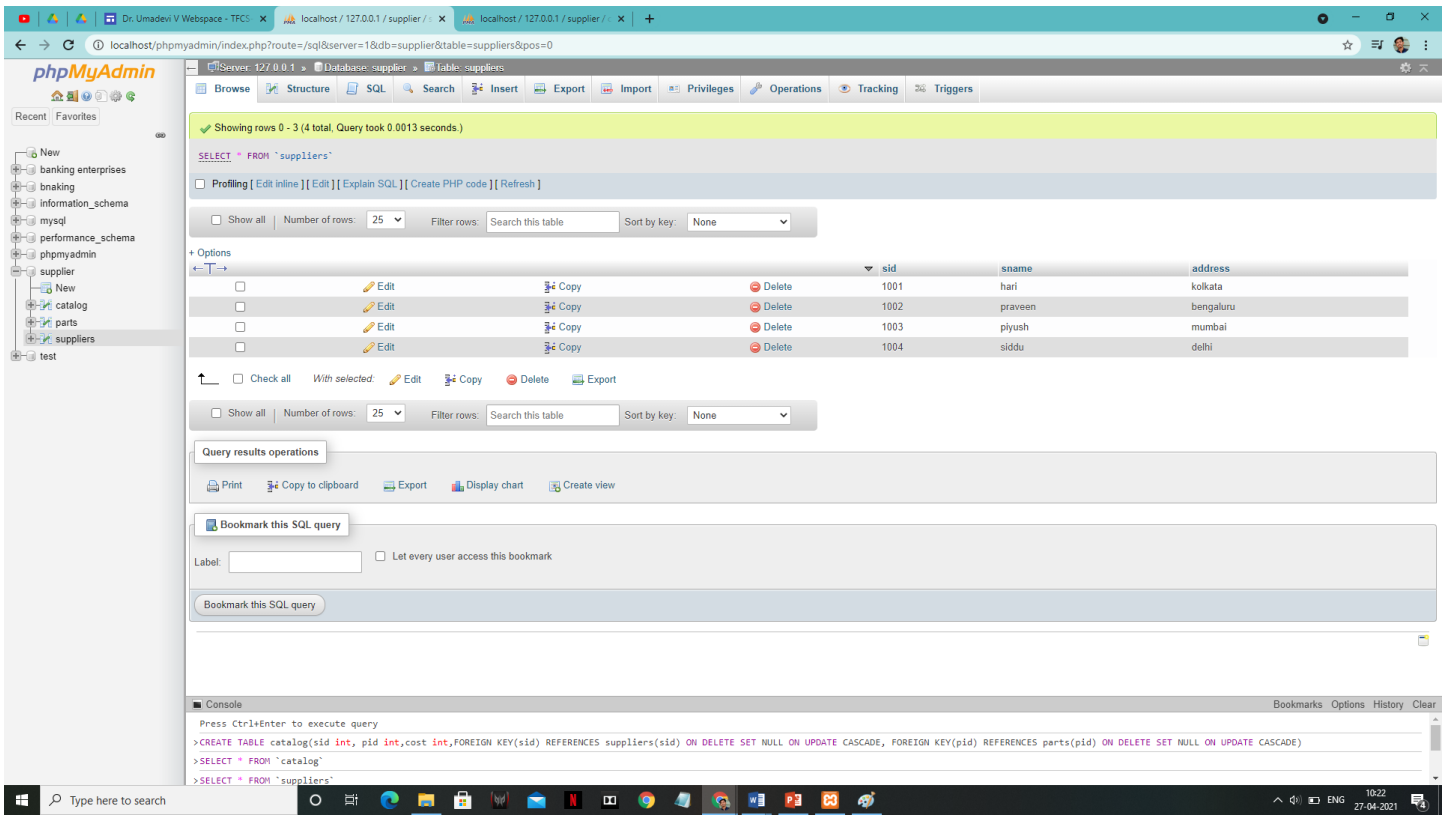
1) **Create the above tables by properly specifying the primary keys and the foreign keys.**

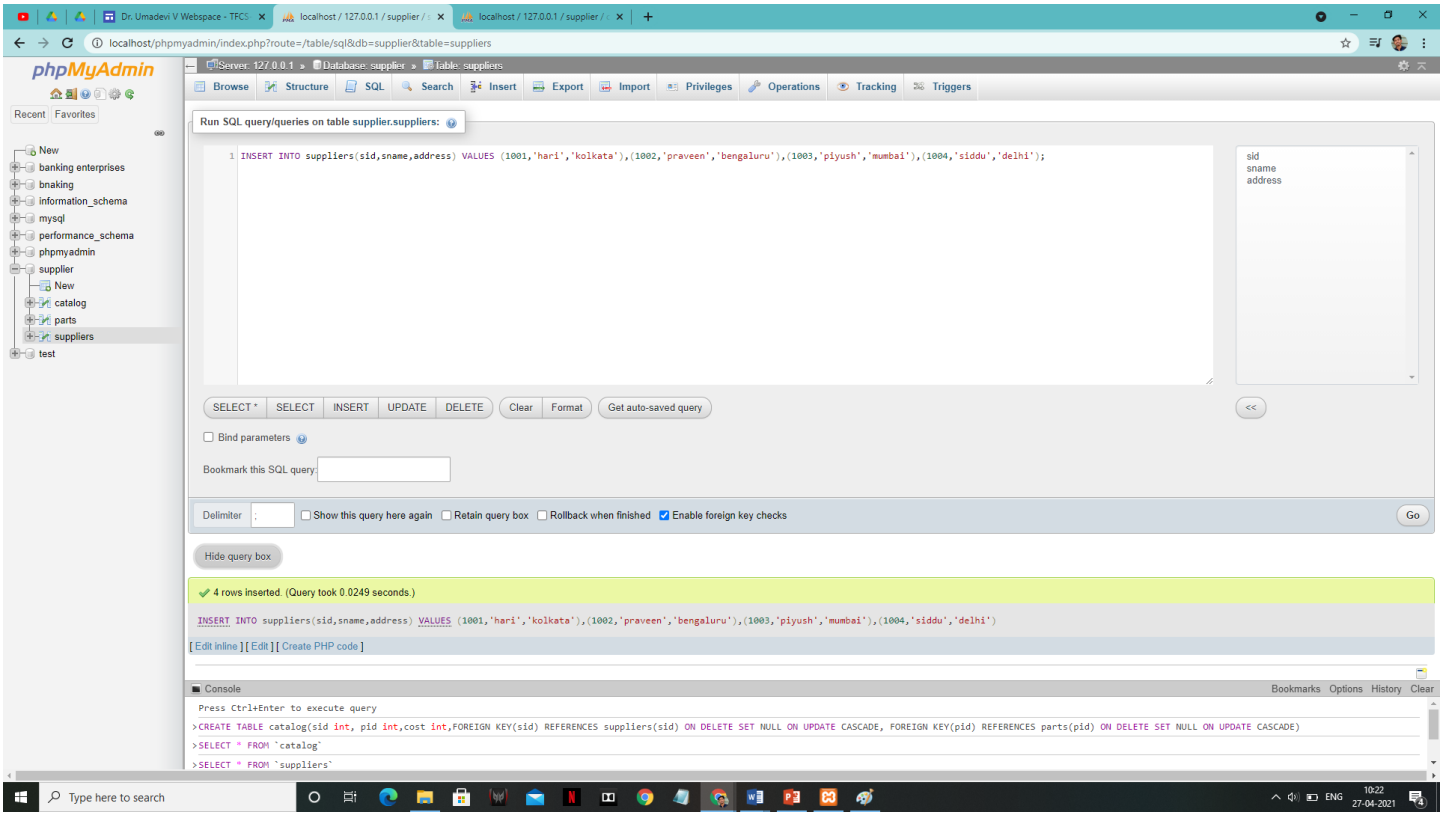




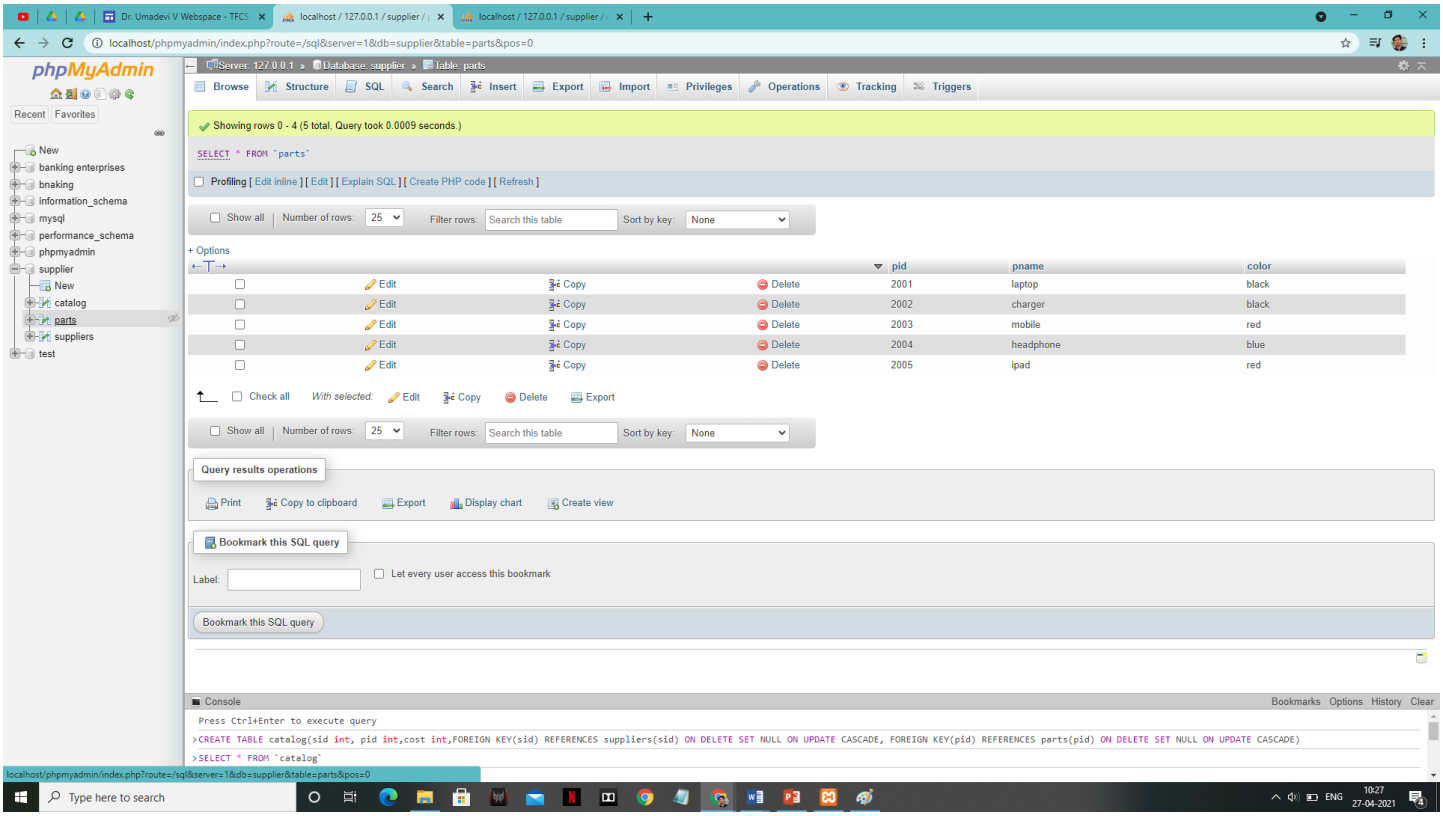
2) Enter tuples for each relation.

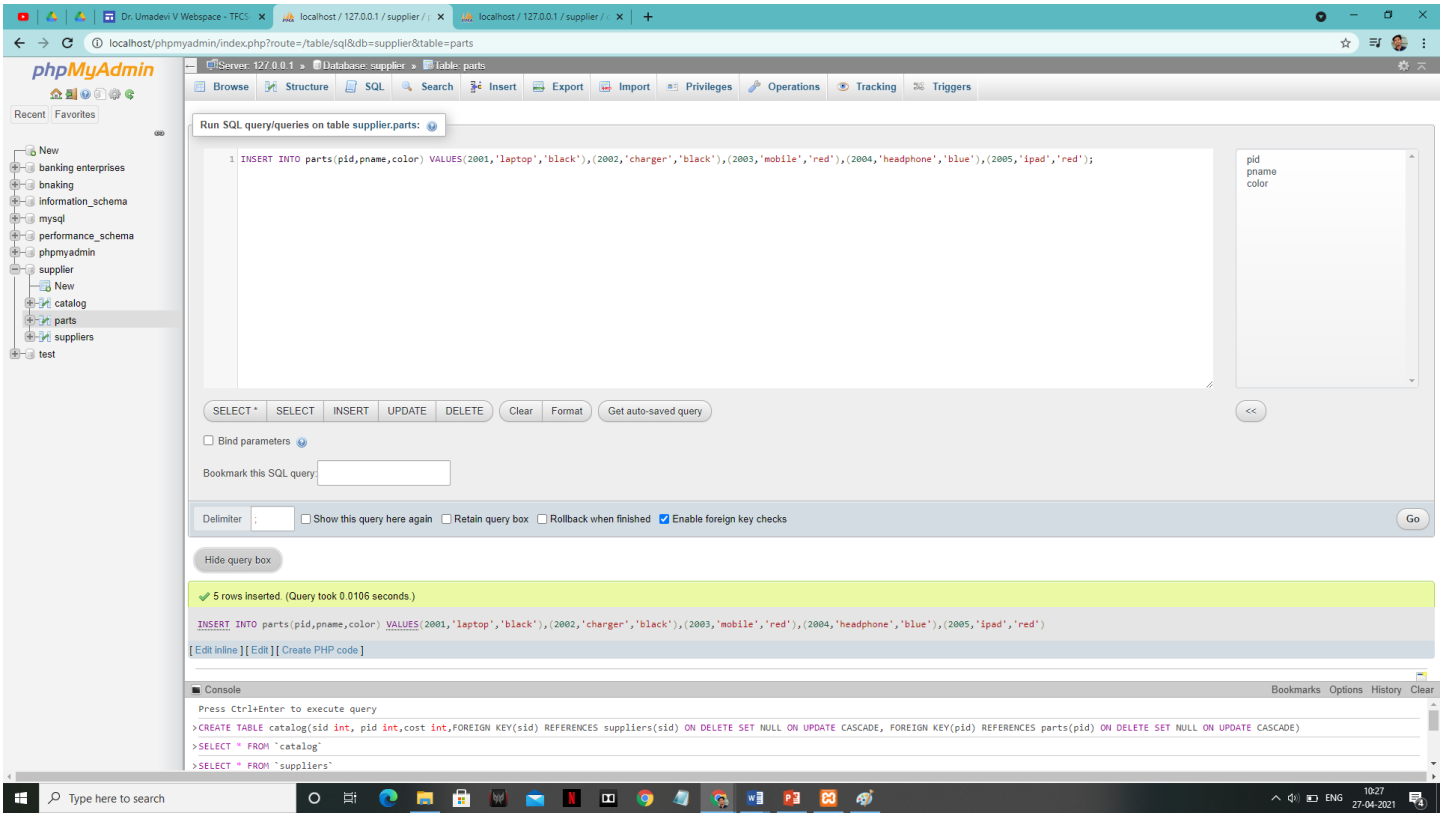
'suppliers' table:



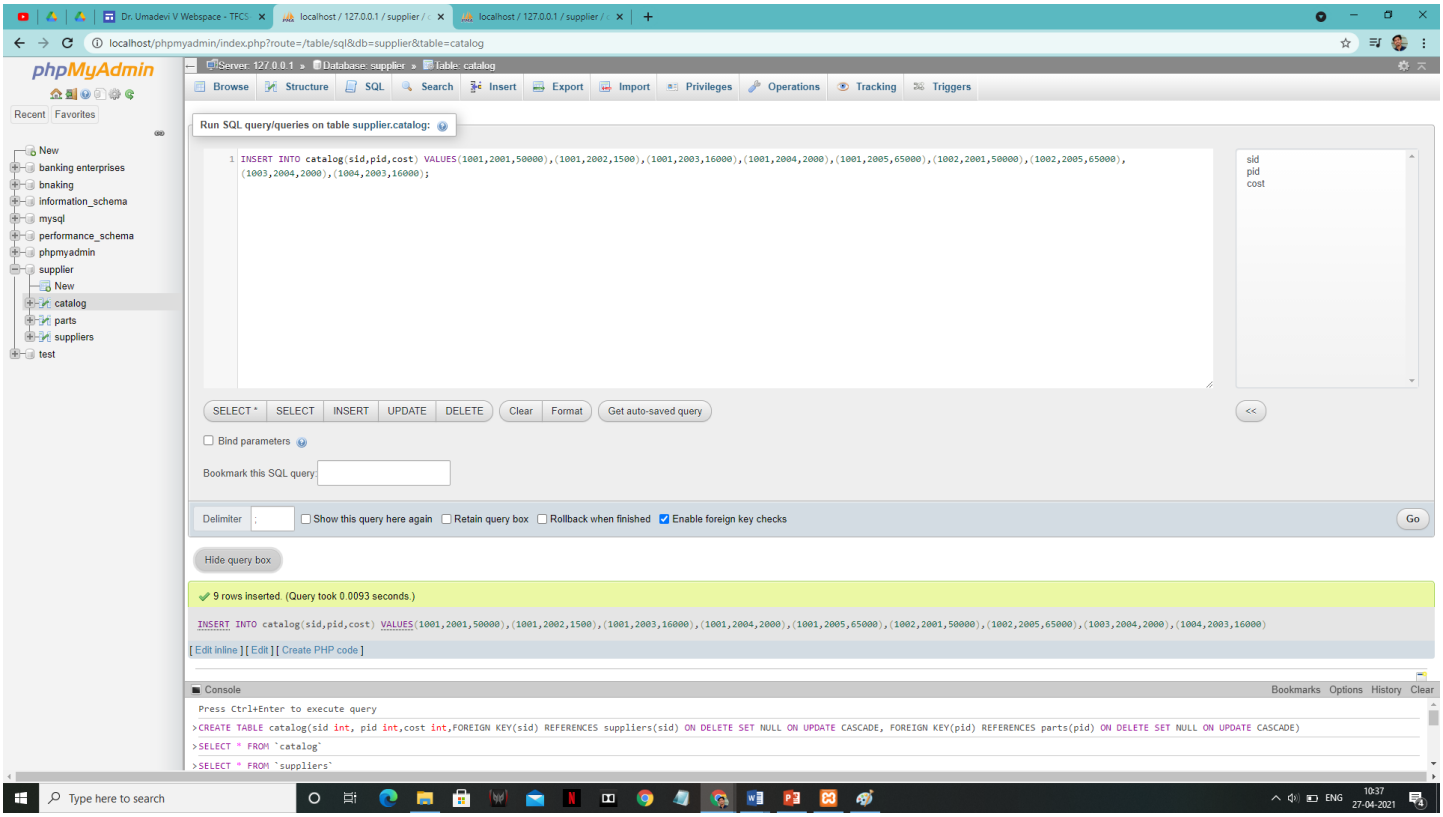

phpMyAdmin
Server: 127.0.0.1 » Database: supplier » Table: suppliers
Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers
Run SQL query/queries on table supplier.suppliers:
INSERT INTO suppliers(sid,sname,address) VALUES (1001,'hari','kolkata'),(1002,'praveen','bengaluru'),(1003,'piyush','mumbai'),(1004,'siddu','delhi');
sid
sname
address
SELECT * SELECT INSERT UPDATE DELETE Clear Format Get auto-saved query
Bind parameters
Bookmark this SQL query:
Delimiter
Show this query here again Retain query box Rollback when finished Enable foreign key checks
Go
Hide query box
4 rows inserted. (Query took 0.0249 seconds.)
INSERT INTO suppliers(sid,sname,address) VALUES (1001,'hari','kolkata'),(1002,'praveen','bengaluru'),(1003,'piyush','mumbai'),(1004,'siddu','delhi')
[Edit inline] [Edit] [Create PHP code]
Console
Bookmarks Options History Clear
Press Ctrl+Enter to execute query
>CREATE TABLE catalog(sid int, pid int,cost int,FOREIGN KEY(sid) REFERENCES suppliers(sid) ON DELETE SET NULL ON UPDATE CASCADE, FOREIGN KEY(pid) REFERENCES parts(pid) ON DELETE SET NULL ON UPDATE CASCADE)
>SELECT * FROM `catalog`
>SELECT * FROM `suppliers`
Type here to search
ENG
10:22
27-04-2021

‘PARTS’ table:

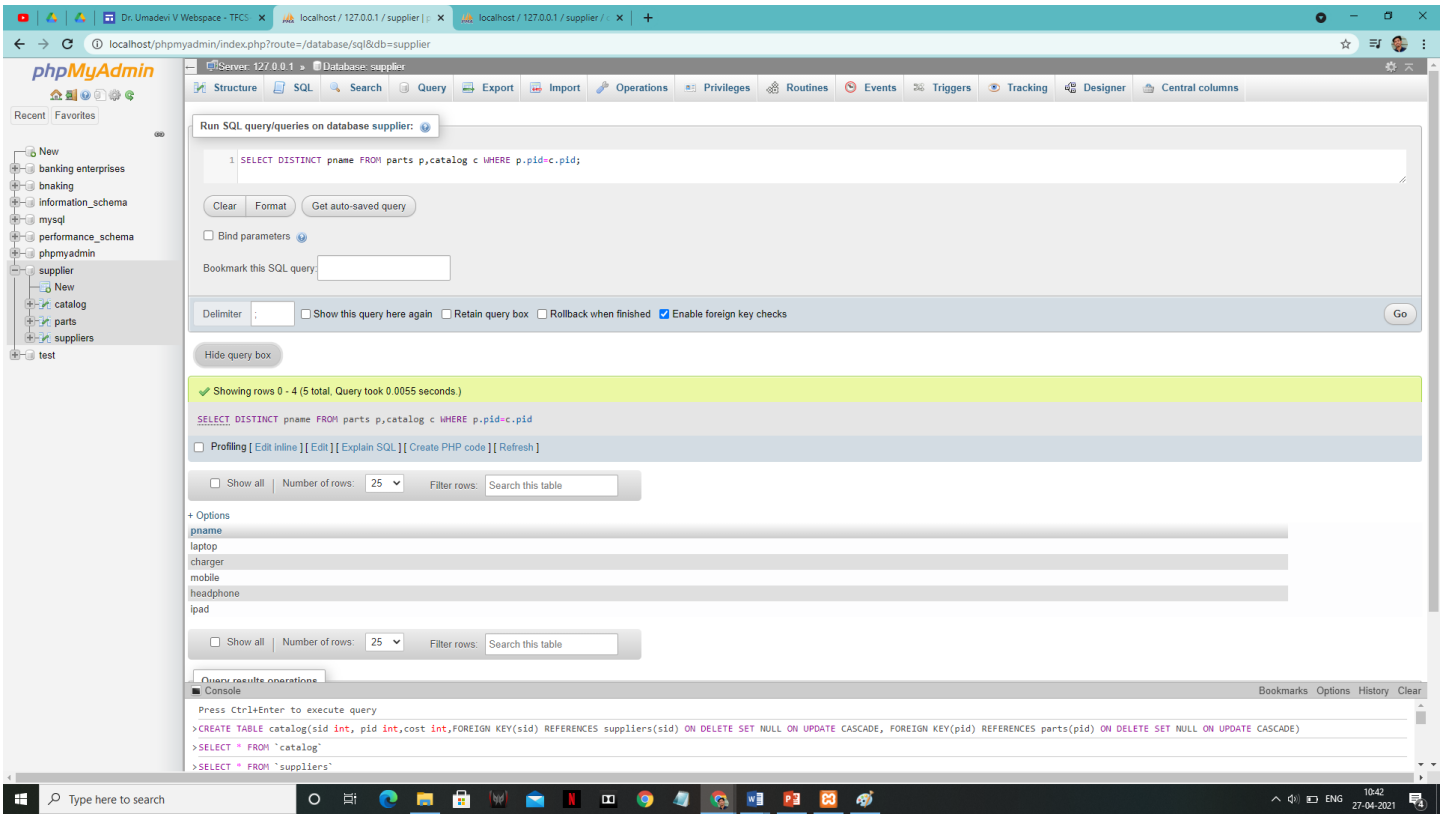

phpMyAdmin
Server: 127.0.0.1 » Database: supplier » Table: parts
Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers
Showing rows 0 - 4 (5 total, Query took 0.0009 seconds.)
SELECT * FROM `parts`
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None
+ Options
pid pname color
Edit Copy Delete 2001 laptop black
Edit Copy Delete 2002 charger black
Edit Copy Delete 2003 mobile red
Edit Copy Delete 2004 headphone blue
Edit Copy Delete 2005 ipad red
Check all With selected: Edit Copy Delete Export
Query results operations
Print Copy to clipboard Export Display chart Create view
Bookmark this SQL query
Label:
Let every user access this bookmark
Bookmark this SQL query
Console
Press Ctrl+Enter to execute query
>CREATE TABLE catalog(sid int, pid int,cost int,FOREIGN KEY(sid) REFERENCES suppliers(sid) ON DELETE SET NULL ON UPDATE CASCADE, FOREIGN KEY(pid) REFERENCES parts(pid) ON DELETE SET NULL ON UPDATE CASCADE)
>SELECT * FROM `catalog`
Bookmarks Options History Clear
Type here to search
ENG 10:27 27-04-2021


phpMyAdmin
Server: 127.0.0.1 » Database: supplier » Table: parts
Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers
Run SQL query/queries on table supplier.parts:
INSERT INTO parts(pid,pname,color) VALUES(2001,'laptop','black'),(2002,'charger','black'),(2003,'mobile','red'),(2004,'headphone','blue'),(2005,'ipad','red');
pid
pname
color
SELECT * SELECT INSERT UPDATE DELETE Clear Format Get auto-saved query
Bind parameters
Bookmark this SQL query:
Delimiter ; Show this query here again Retain query box Rollback when finished Enable foreign key checks
Go
Hide query box
5 rows inserted. (Query took 0.0106 seconds.)
INSERT INTO parts(pid,pname,color) VALUES(2001,'laptop','black'),(2002,'charger','black'),(2003,'mobile','red'),(2004,'headphone','blue'),(2005,'ipad','red')
[Edit inline] [Edit] [Create PHP code]
Console
Press Ctrl+Enter to execute query
>CREATE TABLE catalog(sid int, pid int,cost int,FOREIGN KEY(sid) REFERENCES suppliers(sid) ON DELETE SET NULL ON UPDATE CASCADE, FOREIGN KEY(pid) REFERENCES parts(pid) ON DELETE SET NULL ON UPDATE CASCADE)
>SELECT * FROM `catalog`
>SELECT * FROM `suppliers`
Bookmarks Options History Clear
Type here to search
ENG 10:27 27-04-2021

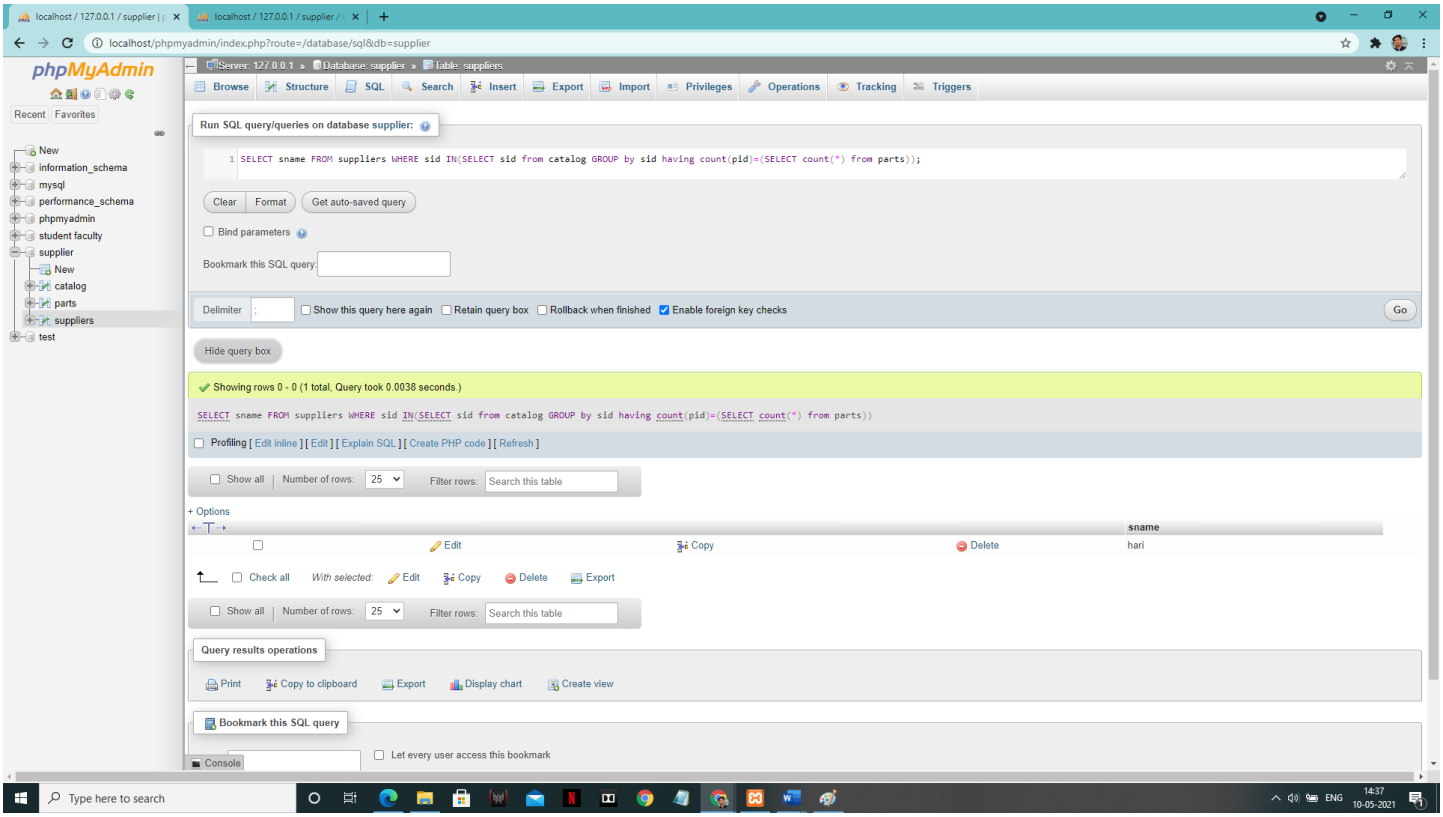
‘CATALOG’ table:



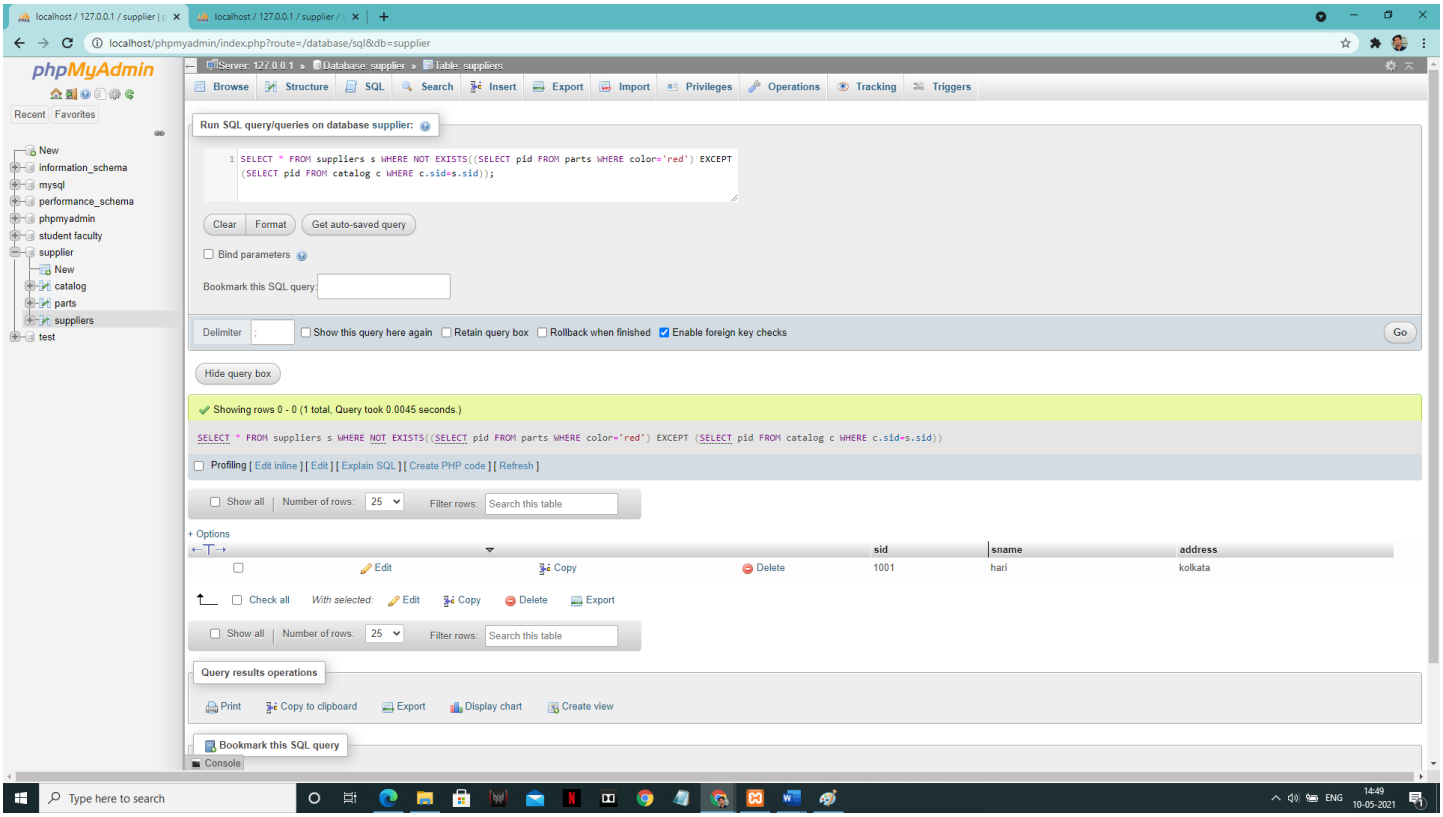
i. Find the pnames of parts for which there is some supplier.



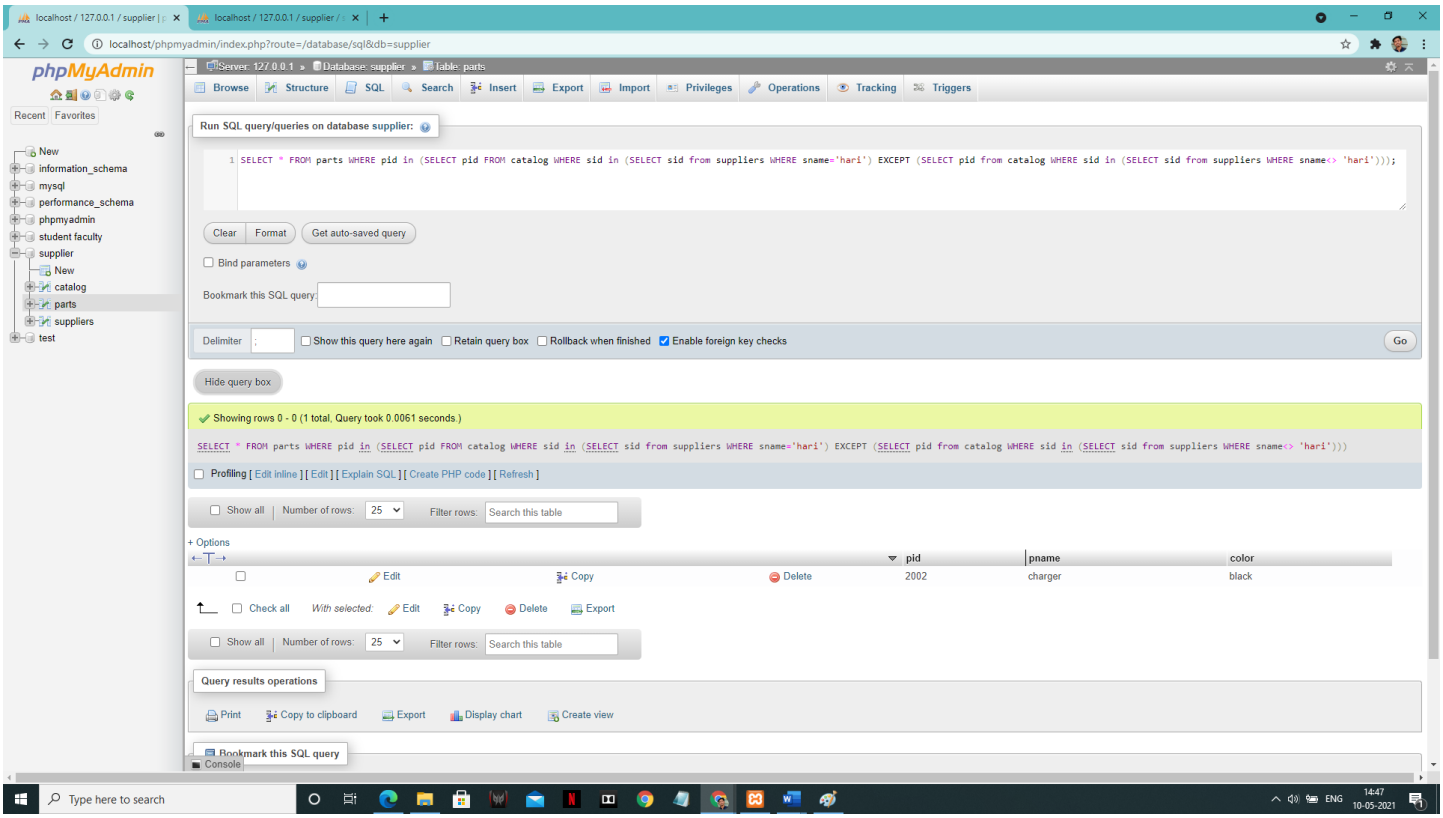
ii. Find the snames of suppliers who supply every part.



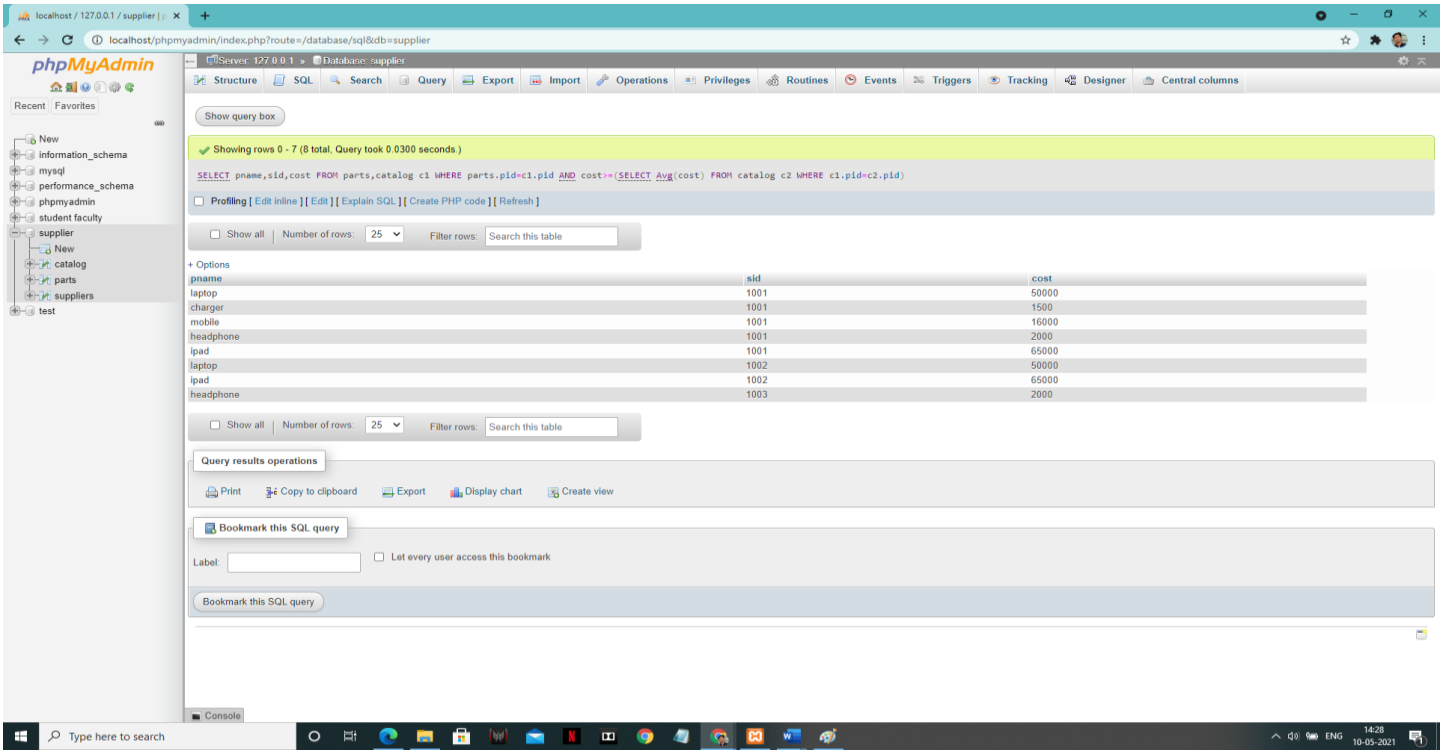
iii. Find the snames of suppliers who supply every red part.



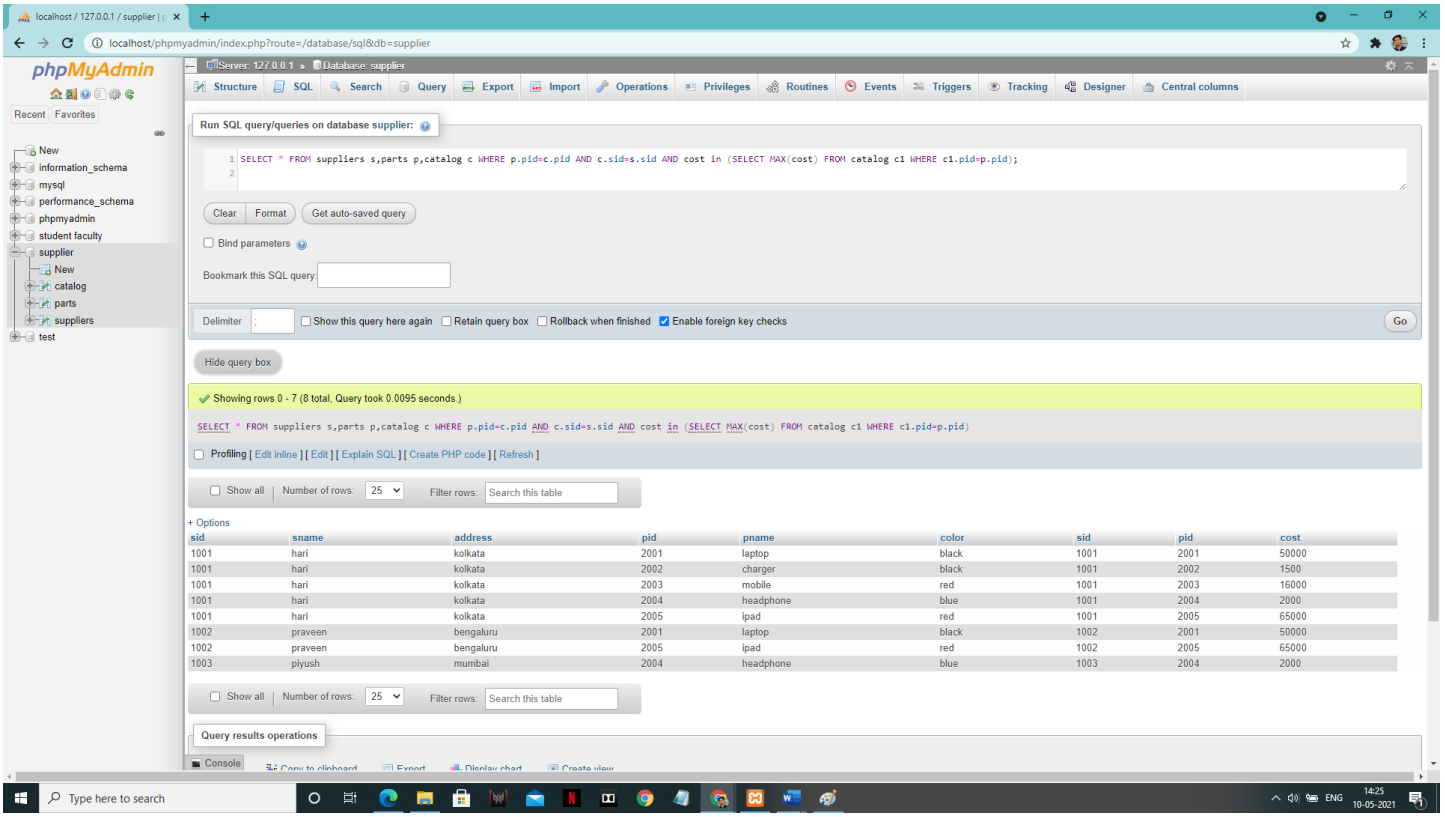
iv. Find the pnames of parts supplied by hari Suppliers and by no one else.



v. Find the sids of suppliers who charge more for some part than the average cost of that part (averaged over all the suppliers who supply that part)



vi. For each part, find the sname of the supplier who charges the most for that part.



vii. Find the sids of suppliers who supply only red parts.