PROGRAM 3. SUPPLIER DATABASE

Consider the following schema:

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

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

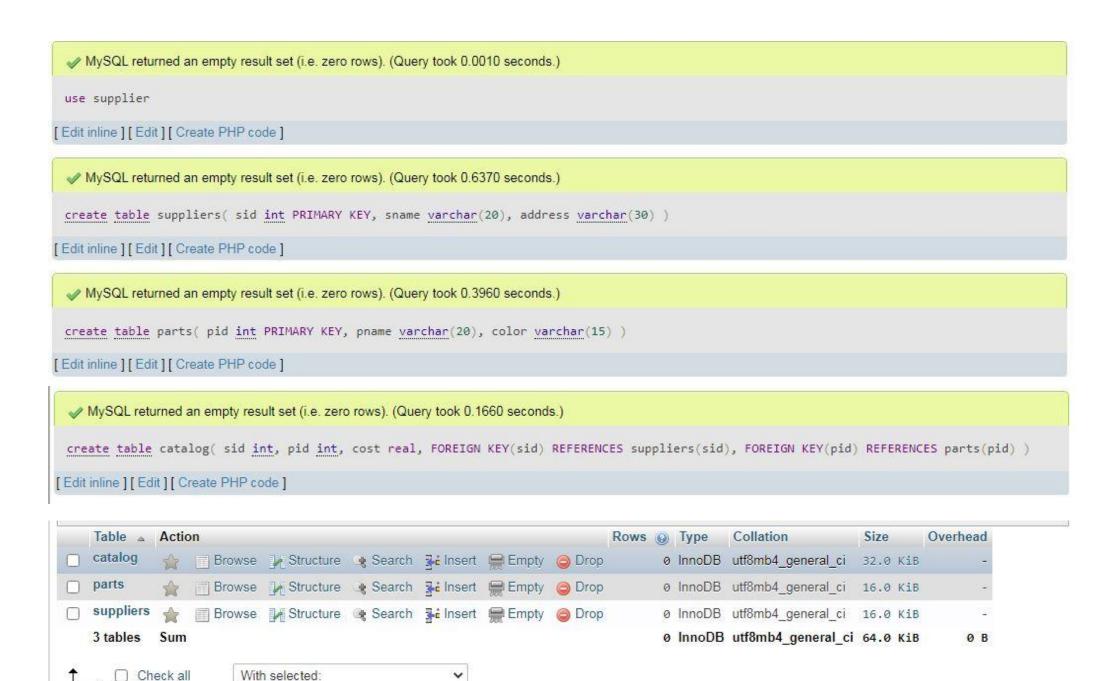
CATALOG (sid: integer, pid: integer, cost: real)

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

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0320 seconds.)

create database supplier

[Edit inline] [Edit] [Create PHP code]



```
√ 1 row inserted. (Query took 0.0570 seconds.)

 INSERT INTO `suppliers`(`sid`, `sname`, `address`) VALUES (1, 'Ram Hardware', '#1,1 Street, Bengaluru')
[ Edit inline ] [ Edit ] [ Create PHP code ]
 1 row inserted. (Query took 0.0780 seconds.)
 INSERT INTO `suppliers`(`sid`, `sname`, `address`) VALUES (2, 'Sita Hawrdware', '#2,2 Street, Mumbai')
[ Edit inline ] [ Edit ] [ Create PHP code ]

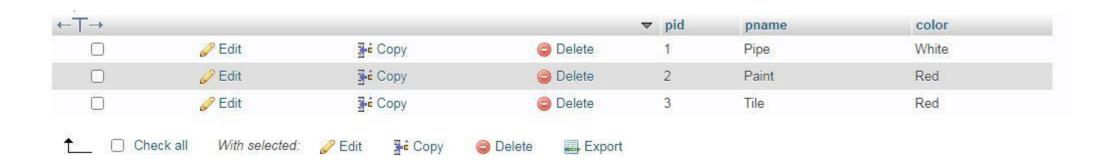
✓ 1 row inserted. (Query took 0.0290 seconds.)

 INSERT INTO `suppliers`(`sid`, `sname`, `address`) VALUES (3, 'Hardware World', '#3,3 Street, Delhi')
[ Edit inline ] [ Edit ] [ Create PHP code ]
 1 row inserted. (Query took 0.0400 seconds.)
 INSERT INTO `suppliers`(`sid`, `sname`, `address`) VALUES (4, 'Laxman Hardware', '#4,4 Street, Chennai')
[ Edit inline ] [ Edit ] [ Create PHP code ]
 1 row inserted. (Query took 0.0510 seconds.)
 INSERT INTO `suppliers`(`sid`, `sname`, `address`) VALUES (5,'Acme Widget Suppliers','#1,1 Street Chandigarh')
[ Edit inline ] [ Edit ] [ Create PHP code ]

Marning: #1265 Data truncated for column 'sname' at row 1
```

$\Gamma \rightarrow$				sid	sname	address
	Edit	≩- å Copy	Delete	1	Ram Hardware	#1,1 Street,Bengaluru
		≩≟ Copy	Delete	2	Sita Hawrdware	#2,2 Street,Mumbai
	🥒 Edit	≩ å Copy	Delete	3	Hardware World	#3,3 Street,Delhi
	Edit	≩≟ Copy	Delete	4	Laxman Hardware	#4,4 Street, Chennai
	Edit	3- Copy	Delete	5	Acme Widget Supplier	#1,1 Street Chandigarh

```
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```
1 row inserted. (Query took 0.0370 seconds.)
 INSERT INTO `catalog`(`sid`, `pid`, `cost`) VALUES (1,1,100)
[ Edit inline ] [ Edit ] [ Create PHP code ]

√ 1 row inserted. (Query took 0.0540 seconds.)

 INSERT INTO `catalog`(`sid`, `pid`, `cost`) VALUES (1,2,200)
[ Edit inline ] [ Edit ] [ Create PHP code ]
 1 row inserted. (Query took 0.0230 seconds.)
 INSERT INTO `catalog`(`sid`, `pid`, `cost`) VALUES (1,3,300)
[ Edit inline ] [ Edit ] [ Create PHP code ]
 1 row inserted. (Query took 0.0220 seconds.)
 INSERT INTO `catalog`(`sid`, `pid`, `cost`) VALUES (5,1,400)
[ Edit inline ] [ Edit ] [ Create PHP code ]

✓ 1 row inserted. (Query took 0.0210 seconds.)
 INSERT INTO `catalog`(`sid`, `pid`, `cost`) VALUES (4,2,150)
[ Edit inline ] [ Edit ] [ Create PHP code ]

√ 1 row inserted. (Query took 0.0250 seconds.)

 INSERT INTO `catalog`(`sid`, `pid`, `cost`) VALUES (2,3,500)
[ Edit inline ] [ Edit ] [ Create PHP code ]
 1 row inserted. (Query took 0.0580 seconds.)
 INSERT INTO `catalog`(`sid`, `pid`, `cost`) VALUES (3,1,50)
[ Edit inline ] [ Edit ] [ Create PHP code ]
 1 row inserted. (Query took 0.0390 seconds.)
 INSERT INTO `catalog`(`sid`, `pid`, `cost`) VALUES (3,2,250)
■ Console [ Edit ] [ Create PHP code ]
```

sid	pid	cost	
1	1	100	
1	2	200	
1	3	300	
5	Ť	400	
4	2	150	
2	3:	500	
3	1	50	
3	2	250	

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



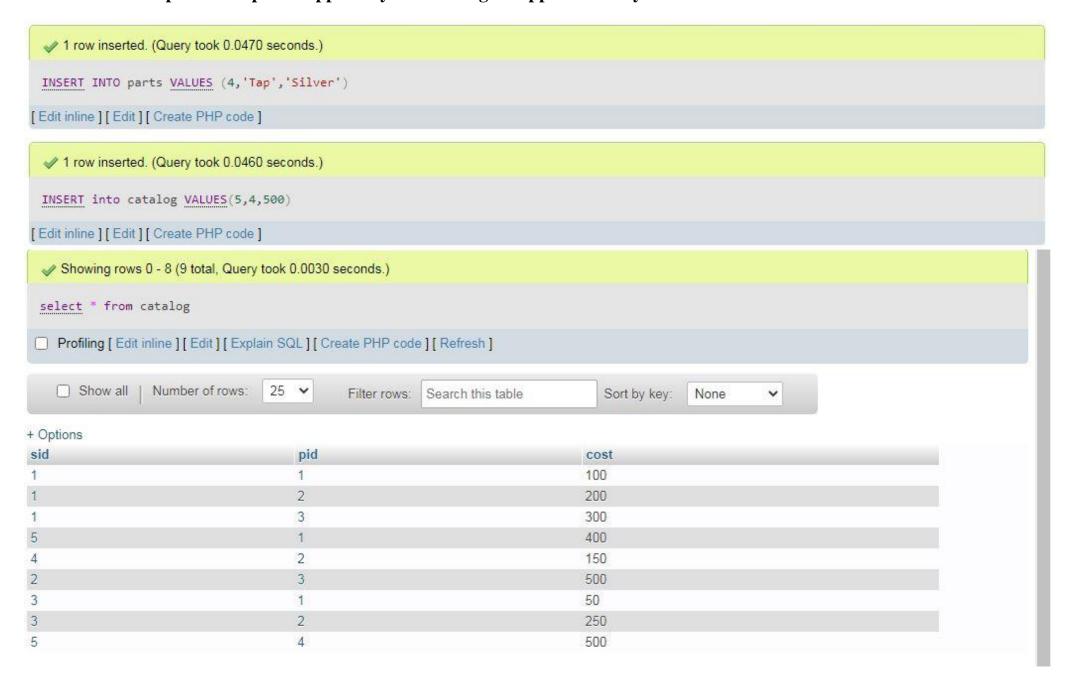
ii. Find the snames of suppliers who supply every part.

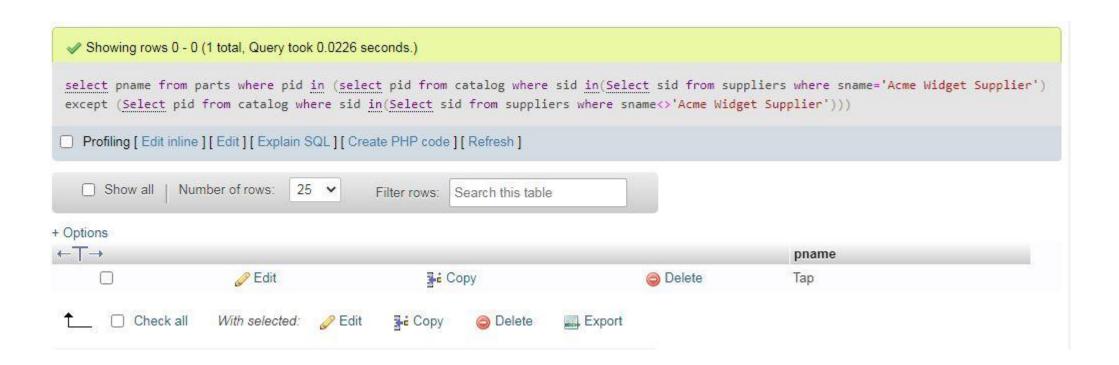


iii. Find the snames of suppliers who supply every red part.

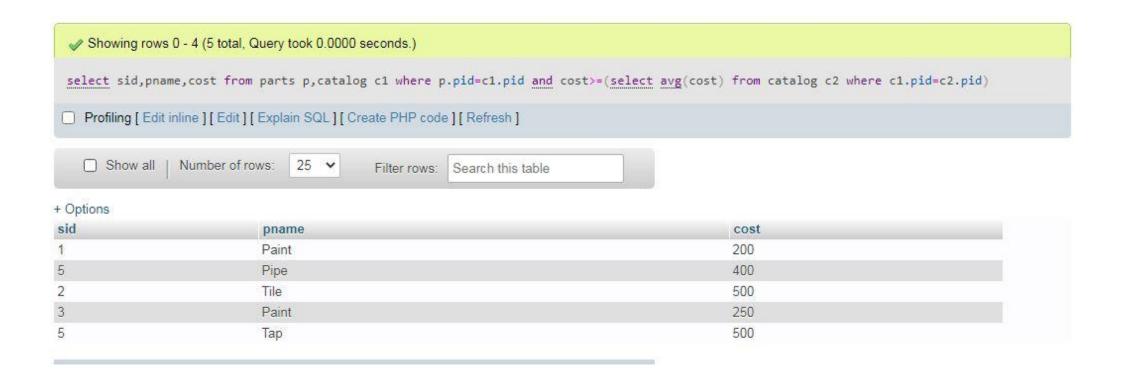


iv. Find the pnames of parts supplied by Acme Widget Suppliers and by no one else

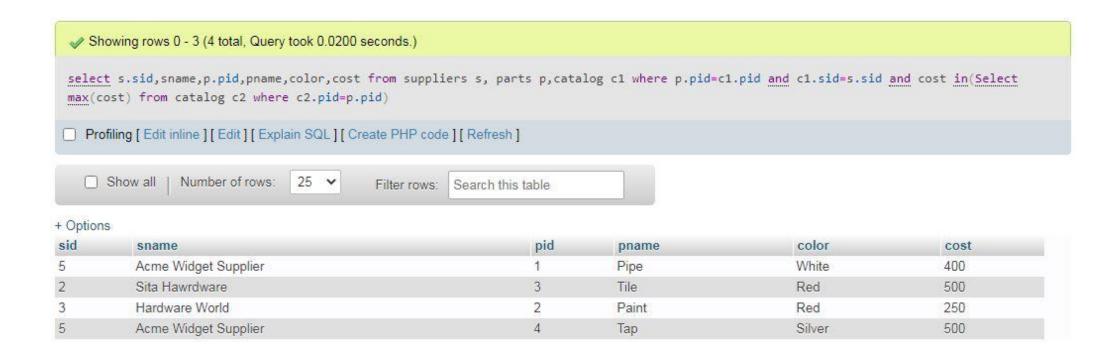




v. Find the sids of suppliers who charge more for some part than the average cost of that part (averaged over all the suppliers who supply that part).



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.

