PROGRAM 3. SUPPLIER DATABASE

sid1 int NOT null,

```
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:
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.
CREATE TABLE supplier(
  sid int NOT null,
  sname varchar(30) not null,
  address varchar(60) not null,
  PRIMARY KEY (sid)
  );
CREATE TABLE parts(
  pid int NOT null,
  pname varchar(30) not null,
  color varchar(60) not null,
  PRIMARY KEY (pid)
  );
CREATE TABLE catalog(
```

```
pid1 int NOT null,

cost real not null,

PRIMARY KEY (sid1),

FOREIGN KEY (pid1) REFERENCES parts(pid)
);
```

DESC supplier;

Your SQL query has been executed successfully.

DESC supplier

+ Options

Field	Туре	Null	Key	Default	Extra
sid	int(11)	NO	PRI	NULL	
sname	varchar(30)	NO		NULL	
address	varchar(60)	NO		NULL	

DESC parts;

Your SQL query has been executed successfully.

DESC parts

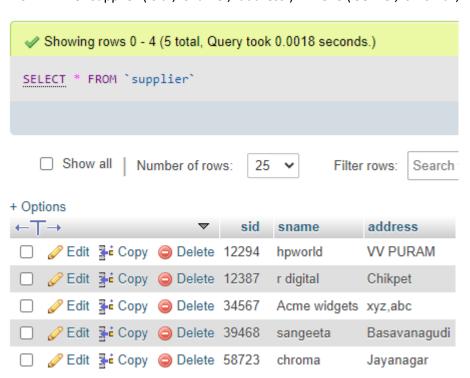
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Field	Туре	Null	Key	Default	Extra
pid	int(11)	NO	PRI	NULL	
pname	varchar(30)	NO		NULL	
color	varchar(60)	NO		NULL	

DESC catalog;



INSERT INTO `supplier`(`sid`, `sname`, `address`) VALUES ('12294',"hpworld","xyz,abc");
INSERT INTO `supplier`(`sid`, `sname`, `address`) VALUES ('34567',"Acme widgets","xyz,abc");
INSERT INTO `supplier`(`sid`, `sname`, `address`) VALUES ('39468',"sangeeta","xyz,abc");
INSERT INTO `supplier`(`sid`, `sname`, `address`) VALUES ('12387',"r digital","xyz,abc");
INSERT INTO `supplier`(`sid`, `sname`, `address`) VALUES ('58723',"chroma","xyz,abc");



```
INSERT INTO `parts`(`pid`, `pname`, `color`) VALUES ('478', 'earphones', 'red');
INSERT INTO `parts`(`pid`, `pname`, `color`) VALUES ('438','tws','white');
INSERT INTO `parts`(`pid`, `pname`, `color`) VALUES ('429','smart band','black');
INSERT INTO `parts`(`pid`, `pname`, `color`) VALUES ('689', 'laptop skin', 'blue');
INSERT INTO `parts`(`pid`, `pname`, `color`) VALUES ('318','pendrive','grey');
INSERT INTO `parts`('pid', `pname', `color') VALUES ('609', 'earphones', 'yellow');
INSERT INTO 'parts' ('pid', 'pname', 'color') VALUES ('128', 'tws', 'black');
INSERT INTO `parts`(`pid`, `pname`, `color`) VALUES ('568','smart band','red');
  Showing rows 0 - 7 (8 total, Query took 0.0017 seconds.)
  SELECT * FROM `parts`
     Show all
                      Number of rows:
                                          25
                                                        Filter row
+ Options

▼ pid

                                                        color
                                           pname

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                                                        black

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                                           pendrive
                                                        grey

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                                           smart band black

Ø Edit 

Gopy 

O Delete 438

                                           tws
                                                        white

Ø Edit 

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                                           earphones red

Ø Edit 

Gopy 

O Delete 568

                                           smart band red

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                                           earphones yellow

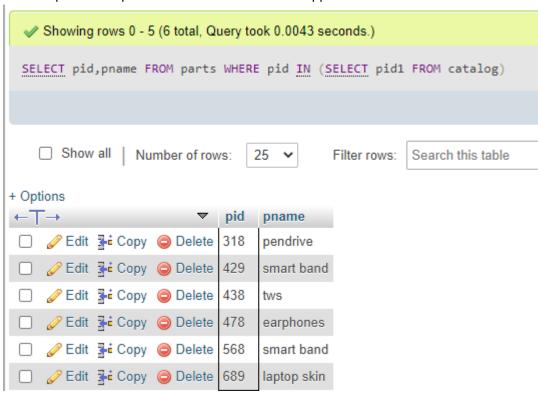
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                                           laptop skin blue
INSERT INTO `catalog` ('sid1`, `pid1`, `cost`) VALUES ('34567','318','499');
INSERT INTO `catalog`(`sid1`, `pid1`, `cost`) VALUES ('34567','429','2500');
INSERT INTO `catalog`(`sid1`, `pid1`, `cost`) VALUES ('34567','438','3000');
INSERT INTO 'catalog' ('sid1', 'pid1', 'cost') VALUES ('34567', '478', '399');
INSERT INTO `catalog`(`sid1`, `pid1`, `cost`) VALUES ('34567','689','600');
INSERT INTO `catalog` (`sid1`, `pid1`, `cost`) VALUES ('12387','478','600');
INSERT INTO `catalog`(`sid1`, `pid1`, `cost`) VALUES ('12387','568','3300');
INSERT INTO `catalog`(`sid1`, `pid1`, `cost`) VALUES ('58723','429','2450');
```

INSERT INTO `catalog`(`sid1`, `pid1`, `cost`) VALUES ('39468','478','600');
INSERT INTO `catalog`(`sid1`, `pid1`, `cost`) VALUES ('12294','689','500');

sid1	pid1	cost
34567	318	499
34567	429	2500
34567	438	3000
34567	478	399
34567	689	600
12387	478	600
12387	568	3300
58723	429	2450
39468	478	600
12294	689	500

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.



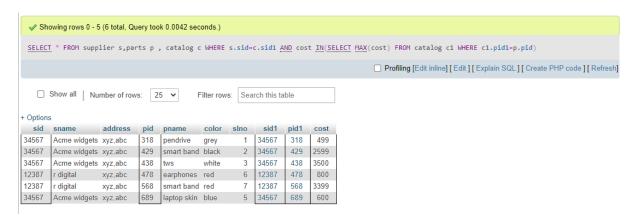
iv. Find the pnames of parts supplied by Acme Widget Suppliers and by no one else.



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.