create table Category

(

Cname varchar(255),

constraint CnamePK primary key (Cname)

);

create table Vendor

(

Vname varchar(255),

Cname varchar(255),

Revenue int,

constraint VendorNamePK primary key (Vname),

constraint CnameFK foreign key(Cname) references Category (Cname)

);

create table Product

(

Pname varchar(255),

constraint PnamePK primary key (Pname)

);

create table Sell

(

Vname varchar(255),

Pname varchar(255),

Price int,

constraint VPnamePK primary key (Vname, Pname),

constraint VnameFK foreign key (Vname) references Vendor(Vname),

constraint PnameFK foreign key (Pname) references Product(Pname)

);

insert into Category values ("C2");

insert into Category values ("C3");

insert into Category values ("C4");

insert into Category values ("C5");

select \* from Category;

insert into Vendor values ("v1", "C1", 21);

insert into Vendor values ("v2", "C2", 11);

insert into Vendor values ("v3", "C1", 15);

insert into Vendor values ("v4", "C3", 14);

insert into Vendor values ("v5", "C1", 21);

insert into Vendor values ("v6", "C4", 22);

insert into Vendor values ("v7", "C2", 18);

insert into Vendor values ("v8", "C5", 19);

insert into Vendor values ("v9", "C3", 20);

select \* from Vendor;

/\*

select Vname from Vendor

where Cname = (select Cname from Vendor

group by Cname

order by count(Cname) desc

limit 1

);

\*/

Query 1:

select Vname from Vendor

where Cname in (select Cname

from Vendor

group by Cname

having count(Cname) in (select max(count)

from ( select count(Cname) as count

from vendor

group by Cname)

)

);

Query 2:

select distinct Pname from Sell

where Vname = ( select Vname

from Vendor

where Revenue > 20);

select SNode, COUNT(DISTINCT ENode) AS Node\_Cnt from Graph

GROUP BY SNode

union

select ENode, 0 from Graph where

ENode not in ( select SNode from Graph)

order by SNode;

……………………………………………………………………………………………………………………………………………………………..select vname, AVG(price) as avg\_price from Sell where vname In (select vname from Vendor group by cname order by revenue desc) group by vname;

select vname , cname , (select AVG(price) as avg\_price from Sell s where s.vname In (select vname from Vendor v group by v.cname order by revenue desc) group by s.vname) as avg\_price from Vendor v1 where v1.vname in (select vname from Sell s1 where (s1.vname) In (select vname from Vendor group by cname order by revenue desc) group by s1.vname);

select vname, cname from Vendor order by cname;

select vname, AVG(price) as avg\_price, cname as cname from Sell where (vname, cname) In (select vname, cname from Vendor group by cname order by revenue desc) group by vname ;

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