Q5

mysql> create database product;

mysql> use product;

mysql> create table suppliers(

-> Sno int(8) primary key,

-> Sname varchar(20) not null,

-> Status char(20) not null,

-> Scity char(30) not null);

mysql> create table Parts(

-> PNo int(8) primary key,

-> Pname varchar(20) not null,

-> Colour varchar(20) not null,

-> Weight int(4) not null,

-> City char(20) not null);

mysql> create table Project(

-> Jno int(8) Primary key,

-> Jname char(20) not null,

-> Jcity char(20) not null);

mysql> create table Shipment(

-> Sno varchar(20) not null,

-> Pno int(8) not null,

-> Jno int(8) not null,

-> Quantity int(8) not null,

-> foreign key(Sno) references suppliers(Sno),

-> foreign key(Pno) references Parts(Pno),

-> Foreign key(Jno) references Project(Jno));

mysql> insert into suppliers values(1,"S1",40,"BRISBEN");

mysql> insert into suppliers values(2,"S2",59,"AUSTRALLIA");

mysql> insert into suppliers values(3,"S4",92,"PARIS");

mysql> insert into suppliers values(4,"S2",30,"LAS VEGAS");

mysql> insert into suppliers values(5,"S3",15,"LONDON");

mysql> insert into parts values( 001,"P1","BLUE",34,"PARIS");

mysql> insert into parts values( 002,"P2","GREEN",10,"BRISBEN");

mysql> insert into parts values( 003,"P3","RED",24,"LONDON");

mysql> insert into parts values( 004,"P2","Green",50,"LONDON");

mysql> insert into parts values( 005,"P2","Black",30,"AUSTRALLIA");

mysql> insert into project values(201,"J1","BRISBEN");

mysql> insert into project values(202,"J2","AUSTRALLIA");

mysql> insert into project values(203,"J3","PARIS");

mysql> insert into project values(204,"J4","LONDON");

mysql> insert into project values(205,"J4","PARIS");

mysql> insert into shipment values(1,004,202,300);

mysql> insert into shipment values(3,005,203,230);

mysql> insert into shipment values(5,002,203,540);

mysql> insert into shipment values(1,003,201,240);

mysql> insert into shipment values(2,001,205,890);

mysql> insert into shipment values(1,001,202,480);

Q (a) Primary Key- Sno in table Suppliers

Pno in table Parts

Jno in table Project

Foreign Key- Sno in table Shipment

Pno in table Shipment

Jno in table Shipment

Q (b) mysql> select Sno from suppliers where scity="Paris" and Status>20;

Q (c) mysql> Select \* from suppliers where Sno in(select Sno from shipment where Pno in(select Pno from parts where Pname="P2")) Order by sno;

Q (d) mysql> Select Sname from suppliers where Sno in(Select distinct sno from shipment where Pno in(select Pno from parts where Pname!="P2"));

Q (e) mysql> select s.Sno, s.Pno, s.Jno, s.Quantity, s.quantity\*p.weight as "Total\_shipment\_weight" from shipment as s, parts as p where s.pno=p.pno;

Q (f) mysql> Select \* from shipment where quantity between 300 and 750;

Q (g) mysql> select Pno from parts where weight>16 or pno in(select pno from shipment where sno in(select s.sno from shipment as s, suppliers as su where s.sno=su.sno and su.sname="S2"));

Q (h) mysql> select city from parts where colour="Red" and Pno in(select pno from shipment where quantity>5);

Q (i) mysql> select \* from parts where pno in(select Pno from shipment where sno in(select sno from suppliers where Scity="London"));

Q (j) mysql> select Pno from shipment where sno in(select sno from suppliers where scity="London") and Jno in(Select jno from project where Jcity="London");

Q (k) mysql> select count(distinct(Jno)) as "No. of Project Supplied by supplier S1" from shipment where sno in(select sno from suppliers where Sname="S1");

Q (l) mysql> select count(\*) from parts where Pno in(Select Pno from shipment where sno in(select Sno from suppliers where sname ="S1")) and Pname="P1";

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