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Assignment -3

1)

a) select model,speed,hd from pc where price < 1000;

b) select model,speed as gigahertz,hd as gigabytes from pc where price < 1000;

c) select product.maker from product,printer where printer.model = product.model;

d) select model,hd,screen from laptop where price >1000;

e) select * from printer where color=true;

f) select model,hd from pc where speed=3.2 and price < 2000;

 2)

   a) select maker,speed from product natural join laptop where laptop.hd >= 30;

   b)   (select model,price from product natural join pc where product.maker = 'B') union   (select model,price from product natural join laptop where product.maker = 'B')   union   (select model,price from product natural join printer where product.maker = 'B') ;

   c)   select maker from product where product.ctype = 'laptop' and maker not in (select maker from product where product.ctype = 'pc');

d) select hd from pc group by hd having count(*) >=2 ;

e) select distinct speed, ram from pc a where ram **in** (select ram from pc where speed = a.speed group by ram having count(*)>1);

f) (select maker from product natural join pc where pc.speed > (3.0)) union (select maker from product natural join laptop where laptop.speed > (3.0));

3)

a) select maker from product where model in (select model from pc where pc.speed >= (3.0)) ;

b) select model,max(price) from printer;

c) select laptop.speed from laptop where laptop.speed < (select max(pc.speed) from pc);

d) select A.modelnum,max(A.maxprice) from ((select laptop.model as modelnum,max(laptop.price) as maxprice from laptop) union (select pc.model as modelnum,max(pc.price) as maxprice from pc) union (select printer.model as modelnum,max(printer.price) as maxprice from printer))   A;

e) select maker,min(price) from product,printer where printer.color = TRUE ;

f) select maker, pc.speed, pc.ram from product natural join pc where pc.speed >= (select max(speed) from pc) order by ram asc limit 1;

4)

a)select avg(speed) from pc;

b)select avg(speed) from laptop where price > 1000;

c)select avg(A.pcprice) from (select maker,price as pcprice from product natural join pc where product.maker='A') A;

d) select avg(C.Bprice) from ((select maker,price as Bprice from product natural join pc where product.maker='B') union (select maker,price as Bprice from product natural join laptop where product.maker='B')) C;

e) select avg(price) from pc group by speed;

f) select avg(S.screensize) from   (select maker,screen as screensize from product natural join laptop where product.ctype = 'laptop') S group by S.maker;

g)select maker from product where model in   (select distinct(model) from pc natural join product group by maker having count(model)>=3);

h) select maker,max(price) from product natural join pc group by maker;

i)select avg(price),speed from pc where speed >=2 group by speed;

j) select maker,avg(hd) from pc natural join product where maker in

(select maker from product where ctype="printer") group
by maker;

5)

a) insert into product value('C',1100,'pc'); insert into pc
value(1100,3.20,1024,180,2400);

b) insert into laptop(speed,ram,hd) (select A.speed,A.ram,A.hd from
(select * from product natural join pc where product.ctype='pc' and
maker in (select maker from product where product.ctype='laptop'))
A);

c) SET SQL_SAFE_UPDATES=0

    delete from pc where pc.hd<100;

d) delete from laptop where model not in (select model from product
where product.ctype='laptop' and   maker in (select maker from
product where product.ctype='printer')) ;

e) update product set maker='A' where maker='B' ;

f) update pc set ram = (2 * ram), hd = (60 + hd) where model in (select
model from product   where ctype= 'pc');

g) update laptop set screen = (1 + screen), price = (price - 100) where
model in (select model from product where ctype = 'laptop' and maker
in (select maker from product where maker = 'B'));