//-----------------------------------------------------------

//TD7

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//-----------------------------------------------------------

//Q1 oui

//Q2 Parce que presque tous les astres ici se tourne autour du soleil sauf la lune et il est evident que la lune se tourne autour du terre, donc il suffit de preciser seulment l astre qui tourne

//Q3 Parce qu il existera deux entites qui possede la meme position un: lune et l autre astre qui est en position un et le champ idA2 et pos pour la soleil sera nul.

//Q4 Oui, car la cle du <observation> est ido qui ne depend pas au jour

//Q5

SELECT count(\*) FROM CATEGORIE;

//Q6

select count(\*)

from categorie

where EXISTS (select \*

from astre

where astre.idc=categorie.idc);

//Q7

select min(rayon),max(rayon)

from astre;

//Q8

select round(avg(rayon)/1000, 2)||'milliers km'

from astre;

//Q9

//a)

select max(rayon)

from astre;

//b)

select astre.nom, astre.rayon

from astre

where rayon=(select max(rayon)

from astre)

//Q10

select categorie.idc, count(\*)

from categorie, astre

where categorie.idc=astre.idc

group by categorie.idc;

//Q11

select astre.ida, count(\*)

from astre,tourneautour

where astre.ida=tourneautour.ida2

group by astre.ida;

//Q12

select (astre.nom,observation.dateobs,avg(observation.valobs))

from observation , astre

where astre.ida=observation.ida

group by(astre.ida,observation.dateobs);

//Q13

//a)

select categorie.idc, astre.rayon

from categorie, astre

where categorie.idc=astre.idc and

astre.rayon=(select max(a2.rayon)

from astre a2

where a2.idc=categorie.idc )

group by categorie.idc

order by max(astre.rayon) ASC

//b)

select categorie.nom, astre.rayon

from categorie, astre

where categorie.idc=astre.idc and

astre.rayon=(select max(a2.rayon)

from astre a2

where a2.idc=categorie.idc )

group by categorie.idc

order by max(astre.rayon) DESC

//c)

select categorie.idc, astre.nom, astre.rayon

from categorie, astre

where categorie.idc=astre.idc and

astre.rayon=(select max(a2.rayon)

from astre a2

where a2.idc=categorie.idc )

group by categorie.idc

order by max(astre.rayon) DESC

//Q14

select categorie.idc

from categorie,astre

where categorie.idc=astre.idc

group by categorie.idc

having count(distinct astre.nom)>=2;

//Q15

select ob.dateobs, count(ob.ido),max(ob.valobs)

from observation ob

group by ob.dateobs

having max(ob.valobs)>=8000;

//Q16

select a.nom

from observation ob, astre a

where a.ida=ob.ida

group by ob.dateobs

having count(ob.ido)=2

//Q17

select a.nom

from astre a, tourneautour ta

where ta.ida2=a.ida

group by a.ida

having count(distinct ta.ida1)>=2

//Q18 a)

select ob.dateobs

from observation ob,astre a

where ob.ida=a.ida

group by ob.dateobs

having count(distinct a.ida)=(select count(distinct a2.ida)

from astre a2);

//Q18 b)

select ob.dateobs

from observation ob,astre a

where ob.ida=a.ida

group by ob.dateobs

having count(distinct a.ida)=(select count(a2.ida)

from astre a2, observation o2

where a2.ida=o2.ida);

//Q19 a)

select ca.idc

from categorie ca, astre a

where ca.idc=a.idc

group by ca.idc

having count(distinct a.ida)=(select count(distinct a2.ida)

from observation ob,astre a2,categorie ca2

where ob.ida=a2.ida and a2.idc=ca2.idc and ca.idc=ca2.idc

group by ca2.idc)

//Q19 b)

select ca.nom

from categorie ca, astre a

where ca.idc=a.idc

group by ca.idc

having count(distinct a.ida)=(select count(distinct a2.ida)

from observation ob,astre a2,categorie ca2

where ob.ida=a2.ida and a2.idc=ca2.idc and ca.idc=ca2.idc

group by ca2.idc)

//-----------------------------------------------------------

//TME7

//-----------------------------------------------------------

//Q1

select count(\*)

from athlete at

//Q2

select count(distinct at.aid)

from athlete at, RangIndividuel ri

where at.aid=ri.aid;

//Q3

select round(avg((to\_date('06/02/2014','dd/mm/YYYY')-at.datenaissance)/365),1)

from athlete at

where at.codepays='FRA';

//Q4

select round(avg(ep.datefin-ep.datedebut)+1, 2), min(ep.datefin-ep.datedebut)+1, max(ep.datefin-ep.datedebut)+1

from epreuve ep

//Q5

select avg(count(\*))

from athlete at

group by at.codepays

//Q6

select p.codepays,count(at.aid)

from pays p, athlete at

where at.codepays=p.codepays

group by p.codepays

order by count(at.aid) ASC ;

//Q7

select avg(count(at.aid))

from athlete at, pays p

where at.codepays=p.codepays

group by p.codepays;

//Q8

select eq.eqid,count(at.aid)

from equipe eq, athlete at, athletesequipe aeq

where eq.eqid=aeq.eqid and at.aid=aeq.aid

group by eq.eqid

order by count(at.aid) DESC;

//Q9

select ep.categorie, count(ep.epid)

from epreuve ep

group by ep.categorie;

//Q10

select sp.nomsp, count(ep.epid)

from sport sp, epreuve ep

where sp.sid=ep.sid

group by sp.nomsp

order by count(ep.epid) DESC

//Q11

select p.codepays,count(ri.epid), count(distinct at.aid)

from pays p, epreuve ep, RangIndividuel ri, athlete at

where at.codepays=p.codepays and ri.epid=ep.epid and ri.rang<=3 and at.aid=ri.aid

group by p.codepays

order by count(ri.epid);

//Q12

select p.codepays, s.sid, count(ri.epid), count(distinct at.aid)

from sport s, pays p, epreuve ep, RangIndividuel ri, athlete at

where ep.sid=s.sid and at.codepays=p.codepays and ri.epid=ep.epid and ri.rang<=3 and at.aid=ri.aid

group by p.codepays,s.sid

order by p.codepays, count(ri.epid) DESC;

//Q13

//1)

select eq.eqid

from equipe eq, athlete at, athletesequipe aeq

where eq.eqid=aeq.eqid and aeq.aid=at.aid

group by eq.eqid

having count(distinct at.aid)=10;

//2)

select eq.eqid

from equipe eq, athlete at, athletesequipe aeq

where eq.eqid=aeq.eqid and aeq.aid=at.aid

group by eq.eqid

having count(distinct at.aid)=(select max(count(distinct at2.aid))

from equipe eq2, athlete at2, athletesequipe aeq2

where eq2.eqid=aeq2.eqid and aeq2.aid=at2.aid

group by eq2.eqid);

//Q14

select sum(count(distinct ep.epid))

from epreuve ep, rangindividuel ri

where ep.epid=ri.epid

group by ep.epid

having count(distinct ri.aid)>=100;

//Q15

select distinct p.nomp

from epreuve ep, rangindividuel ri, athlete at, pays p

where ep.epid=ri.epid and ri.rang<=3 and ri.aid=at.aid and p.codepays=at.codepays

group by p.nomp

having count( ri.epid)>=20;

//Q16

select sp.sid

from sport sp, epreuve ep

where sp.sid=ep.sid

group by sp.sid

having count(distinct ep.categorie)=(select sum(count(distinct ep2.categorie))

from epreuve ep2

group by ep2.categorie)

//Q17

select p.nomp,count( distinct sp.sid)

from pays p, athlete at, RangIndividuel ri, epreuve ep, sport sp

where p.codepays=at.codepays and ri.epid=ep.epid and ri.aid=at.aid and ep.sid=sp.sid

group by p.nomp

having count( distinct sp.sid)=(select sum(count(distinct sp2.sid))

from sport sp2, epreuve ep, athlete at2, rangindividuel ri2

where ep.sid=sp2.sid and ri2.epid=ep.epid and at2.aid=ri2.aid

group by sp2.sid);

//Q18

select sp.nsp, count(jo.njo), sum(sp.somme)

from sponsorise sp, joueur jo

where sp.njo=jo.njo

group by sp.nsp

order by sum(sp.somme) DESC;

//Q19

select eqf.neq

from equipef eqf, match m

where eqf.neq=m.eq1

group by eqf.neq

having count(distinct m.st)>=3;

//Q20

select sp.nsp

from sponsorise sp, joueur jo, equipef eqf

where sp.njo=jo.njo and eqf.neq=jo.eq

group by sp.nsp

having count(eqf.neq)=count(distinct eqf.neq)

//Q21

select eqf1.neq, sum(d1.nbkm)

from equipef eqf1, match m1, match m2, dist d1

where eqf1.neq=m1.eq1 and eqf1.neq=m2.eq1 and m1.datem<m2.datem and d1.st1=m1.st and d1.st2=m2.st and (select count(m3.datem)

from match m3

where m3.datem<m2.datem and m3.datem>m1.datem and m3.eq1=eqf1.neq)=0

group by eqf1.neq