TP de base de données

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**TP sur la base de données CINEMA**

--1--

select \* from film order by titre;

--2--

select distinct ville from personne order by ville;

--3--

select titre, budget, 'Film à petit budget' as type from film where budget <= 1000000;

--4--

select \* from personne where adr like '%Avenue%';

--5--

select \* from personne where tel is null;

--6--

select distinct nom, pren from film

left join personne on numpers = real

where ville like 'N%';

--7--

select titre, annee, nom from film

left join personne on numpers = real

where nom != 'Spielberg';

--8--

select nom, pren, titre, round(sal\_real/longueur) from film

left join personne on numpers = real;

--9--

select titre, nom, pren, sal from film

left join distribution on distribution.numfilm = film.numfilm

left join acteur on distribution.numact = acteur.numact

left join personne on acteur.numpers = personne.numpers

where sal is not null order by titre, sal desc;

--10--

select nom, pren, sal/1.03, titre from acteur

left join distribution on acteur.numact = distribution.numact

left join personne on acteur.numpers = personne.numpers

left join film on film.numfilm = distribution.numfilm

where titre is not null;

--11--

select act.nom, act.pren from personne act

left join acteur on act.numpers = acteur.numpers

left join distribution on acteur.numact = distribution.numact

left join film on distribution.numfilm = film.numfilm

left join personne real on film.real= real.numpers

where real.nom = 'Spielberg'

and acteur."specialite" = (

select numgenre from genre

where libellegenre = 'Drame');

--12--

select distinct act.nom, act.pren from personne act

left join acteur on act.numpers = acteur.numpers

left join distribution on acteur.numact = distribution.numact

left join film on distribution.numfilm = film.numfilm

left join personne real on film.real= real.numpers

where act.numpers = real.numpers;

--13--

select cinema.nom, titre from cinema

left join salle on salle.numcine = cinema.numcine

left join programmation on salle.numcine = programmation.numcine and salle.numsalle = programmation.numsalle

left join film on programmation.numfilm = film.numfilm

left join personne on film.real = personne.numpers

where comp = 'indep'

and cinema.ville = 'Bordeaux'

and taille > 30

and nbplaces > 100

and horaire = '22:00';

--14--

select libellegenre, titre from film

left join genre on genre = numgenre;

--15--

select nom from cinema

left join salle on cinema.numcine = salle.numcine

where salle.numcine is null;

--16--

select nom, salle.numsalle, titre, datedeb, datefin, horaire, prix from cinema

left join salle on salle.numcine = cinema.numcine

left join programmation on salle.numcine = programmation.numcine and salle.numsalle = programmation.numsalle

left join film on programmation.numfilm = film.numfilm;

--17--

select sum(sal) from distribution

where numfilm = (

select numfilm from film

where titre = 'Jurassic Parc');

--18--

select libellegenre ,count(\*) from film

left join genre on genre = numgenre

group by libellegenre;

--19--

select libellegenre, sum(budget) from genre

left join film on numgenre = genre

where annee between 1990 and 1999

group by libellegenre

having sum(budget) > 10000000;

--20--

select nom, ville from cinema, salle

where cinema.numcine = salle.numcine

group by nom;

--21--

select nom, pren from personne

where numpers = any(

select real from film)

and ville not in(

select ville from cinema);

--22--

select titre, annee, longueur from film

where longueur >= all(

select longueur from film);

--23--

select titre from film

left join programmation on film.numfilm = programmation.numfilm

left join cinema on programmation.numcine = cinema.numcine

minus

select titre from film

left join programmation on film.numfilm = programmation.numfilm

left join cinema on programmation.numcine = cinema.numcine

where cinema.nom = 'UGC';

--24--

select nom, sum(sal) from personne

left join acteur on personne.numpers = acteur.numpers

left join distribution on distribution.numact = acteur.numact

group by nom having sum(sal) > any(

select sum(sal\_real) from personne

left join film on numpers = real

group by nom);

--25--

select nom, sum(sal) from personne

left join acteur on personne.numpers = acteur.numpers

left join distribution on distribution.numact = acteur.numact

group by nom having sum(sal) >= all(

select sum(sal\_real) from film

group by real);

--26--

select distinct nom, pren from personne

left join film on numpers = real

left join distribution on distribution.numfilm = film.numfilm

where sal\_real > distribution.sal;

**TP sur la base de données TRAIN**

create table ligne(

nuligne number(2),

rang number(2),

nomgare varchar2(20),

constraint pk\_ligne primary key(nuligne,rang)

);

create table wagon(

nuwagon number(4) primary key,

typewagon varchar2(20),

poidsvide number(2),

capacite number(2),

etat varchar2(20),

nomgare varchar2(20)

);

create table train(

nutrain number(4),

nuwagon number(4),

constraint pk\_train primary key(nutrain,nuwagon),

constraint fk\_wagon foreign key(nuwagon) references wagon(nuwagon)

);

create table trafic(

nutrain number(4),

nuligne number(2),

nujour date,

constraint pk\_trafic primary key(nutrain,nuligne,nujour)

);

create table reseau(

nomgareorigine varchar2(20),

nomgaredestination varchar2(20),

nuligne number(2),

nomgarearrivee varchar2(20),

constraint pk\_reseau primary key(nomgareorigine ,nomgaredestination ,nuligne ,nomgarearrivee)

);

insert into ligne values (10,1,'nantes') ;

insert into ligne values (10,2,'angers') ;

insert into ligne values (10,3,'saumur') ;

insert into ligne values (10,4,'tours') ;

insert into ligne values (11,1,'nantes') ;

insert into ligne values (11,2,'tours') ;

insert into ligne values (13,1,'angers') ;

insert into ligne values (13,2,'paris') ;

insert into ligne values (13,3,'lyon') ;

insert into ligne values (13,4,'beziers') ;

insert into ligne values (15,1,'tours') ;

insert into ligne values (15,2,'bordeaux') ;

insert into ligne values (16,1,'orleans') ;

insert into ligne values (16,2,'tours') ;

insert into ligne values (16,3,'poitiers') ;

insert into ligne values (21,1,'bordeaux') ;

insert into ligne values (21,2,'toulouse') ;

insert into ligne values (30,1,'toulouse') ;

insert into ligne values (30,2,'beziers') ;

commit;

insert into wagon values (1004 , 'frigo' , 10 , 30 , 'libre', 'tours');

insert into wagon values (1104 , 'citerne' , 6 , 15 , 'charge', 'paris');

insert into wagon values (1105 , 'frigo' , 10 , 30 , 'libre', 'orleans');

insert into wagon values (1106 , 'frigo' , 10 , 30 , 'charge', 'tours');

insert into wagon values (2019 , 'plat' , 7 , 20 , 'libre', 'angers');

commit;

insert into train values (4002 , 1104) ;

insert into train values (4002 , 1105) ;

insert into train values (4002 , 1106) ;

insert into train values (4051 , 1004) ;

insert into train values (4051 , 2019) ;

commit;

insert into trafic values (4002 , 10 , TO\_DATE('12/03/13' , 'DD/MM/YY')) ;

insert into trafic values (4002 , 10 , TO\_DATE('14/03/13' , 'DD/MM/YY')) ;

insert into trafic values (4051 , 13 , TO\_DATE('12/03/13' , 'DD/MM/YY')) ;

commit ;

insert into reseau values ('angers','beziers',10,'tours');

insert into reseau values ('bordeaux','beziers',21,'toulouse');

insert into reseau values ('saumur','tours',10,'tours');

insert into reseau values ('toulouse','beziers',30,'beziers');

insert into reseau values ('tours','beziers',15,'bordeaux');

insert into reseau values ('angers','beziers',13,'paris');

insert into reseau values ('paris','beziers',13,'lyon');

insert into reseau values ('lyon','beziers',13,'beziers');

commit;

--1--

select nuwagon from wagon where nomgare = 'tours' and typewagon = 'frigo' and capacite > 10;

--2--

select wagon.nuwagon, typewagon from wagon left join train on wagon.NUWAGON = train.NUWAGON where nutrain = 4002;

--3--

select nuligne from ligne where nomgare = 'tours' and rang != 1;

--4--

select nutrain from trafic left join reseau on trafic.NULIGNE = reseau.NULIGNE where nujour = '12/03/2013' and nomgareorigine = 'angers' and nomgaredestination = 'beziers';

--5--

select nuwagon from train left join trafic on train.nutrain = trafic.nutrain left join reseau on trafic.NULIGNE = reseau.NULIGNE where nujour = '12/03/2013' and nomgareorigine = 'angers' and nomgaredestination = 'beziers';

--6--

select nuligne from trafic group by nuligne having count(distinct nujour)=(select count(distinct nujour) from trafic);

--7--

select distinct nomgarearrivee from reseau where nuligne =10;

--8--

select nutrain, sum(poidsvide+capacite) as poids\_en\_charge from train left join wagon on wagon.NUWAGON = train.NUWAGON where nutrain = 4002 group by nutrain;

--9--

select distinct nomgare from reseau left join ligne on reseau.NULIGNE = ligne.NULIGNE where nomgareorigine = 'angers' and nomgaredestination = 'beziers';

--10--

select nutrain, count(\*) from train group by nutrain;

--11--

select nutrain from train group by nutrain having count(\*) >= 2;

--12--

create view train2 as select nutrain, wagon.nuwagon, typewagon, capacite from train left join wagon on wagon.NUWAGON = train.NUWAGON;

**TP sur SQL: Langange de données**

1. Manipulation de données

--1—

Insert into employe values (010, ‘Jean’, ‘comptable’, 15/08/2006, 25000, null, 30)

--2—

Update service set lieu = ‘Rennes’ where numservice = 30

--3—

Update employe set salaire =salaire + 100

--4—

delete \* from employe where numservemploye = 30 and fonction = ‘Administratif’

1. Définition de données

--1--

create table employe

(mat number(3),

nom varchar2(50),

fonction varchar2(20),

dateembauche date,

salaire number(6),

commission number(6),

numservemploye number(2),

primary key mat);

create table service

(numservice number(2),

nomservice varchar2(20),

lieu varchar2(20),

primary key numservice);

create table produit

(refproduit varchar2(5),

designation varchar2(20),

primary key refproduit);

create table commander

(mat number(3),

refproduit varchar2(5),

quantite number(2),

primary key (mat,refproduit));

--2--

alter table service

modify designation varchar2(50);

--3--

alter table employe

add adresse varchar2(50);

--4--

alter table service

add budget number(5,2);

--5--

alter table employe

drop dateembauche

1. Contrôle de l’accés