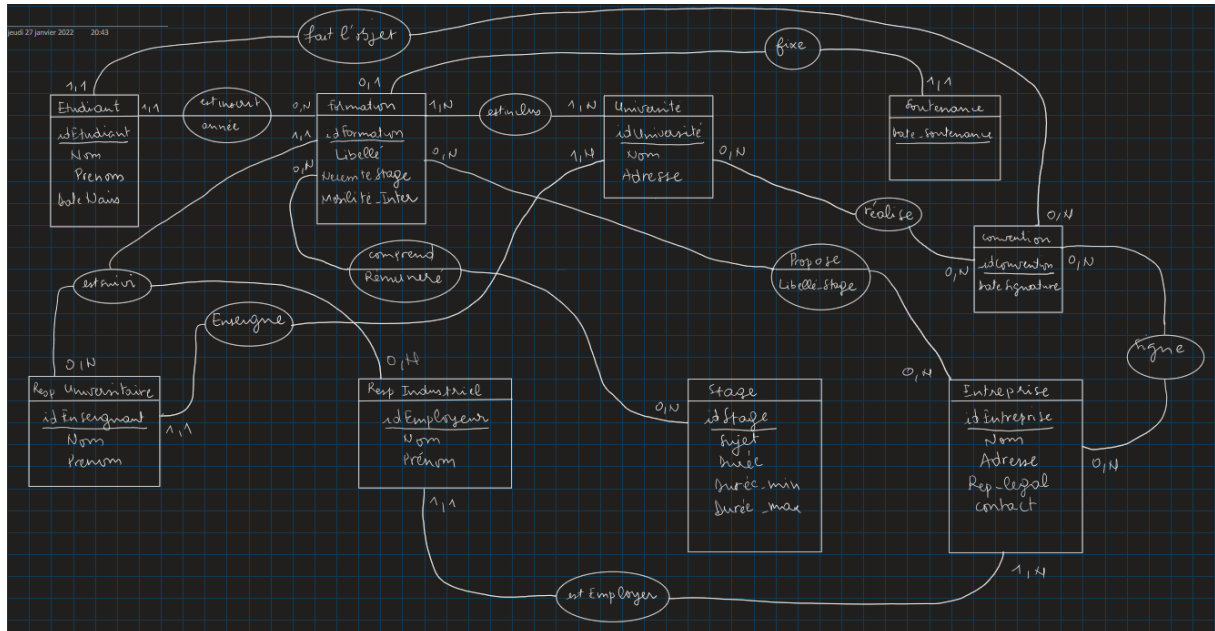# Compte Rendu TP3

THIAM Pape | TASSEMBEDO Brandon

1)

2) Modèle relationnel avec la création des tables

create table etudiant(

idetudiant int,

nom varchar(50),

prenom varchar(50),

datenaissance date,

annee int,

idconvention int,

idformation varchar(50),

primary key(idEtudiant)

);

insert into etudiant

values

(1,'Luzieux','Clara','2002-05-12',2022,20020512,'Master2'),

(2,'Hien','Albert','1992-11-22',2015,19921122,'Master1'),

(3,'Tassembedo','Ayman','2000-06-01',2022,20000601,'Licence3'),

(4,'Faye','Hanes','2003-05-12',2022,20030512,'Prépa1'),

```sql
(5,'Thiam','Pape','2000-12-05',2022,20001205,'Ingénieurie3'),
(6,'Dieng','Fallou','1990-05-12',2015,19900512,'Ingénieurie5'),
(7,'Ka','Demba','1981-05-12',2001,19810512,'DUT1'),
(8,'Vincent','Julien','1997-05-12',2018,19970512,'Licence1'),
(9,'Vercier','Roman','2001-09-02',2022,20010902,'Licence2'),
(10,'Rashford','Isabelle','1996-07-31',2017,19960731,'Licence3'),
(11,'Maidana','Pedro','2000-05-12',2021,20000512,'Prépa2'),
(12,'Sanchez','Alex','2002-08-15',2022,20020815,'DUT2'),
(13,'Gatto','Elisa','1972-04-28',1992,19720428,'Prépa2'),
(14,'Boulanger','Elias','2002-10-10',2021,20021010,'Licence1'),
(15,'Poubelle','Eugène','1999-03-03',2022,19990303,'Ingénieurie4'),
(16,'Sy','Oumar','2000-08-20',2020,20000820,'Licence1'),
(17,'Ba','Sadio','2002-11-12',2022,20021112,'Prépa2'),
(18,'Tricot','Ines','2001-01-01',2021,20010101,'DUT1'),
(19,'Varin','Leo','1960-12-04',1983,19601204,'Ingénieurie3'),
(20,'Einstein','Albert','1970-06-15',1995,19700615,'Master2');


create table formation(
idFormation varchar(50),
libelle varchar(50),
NecessiteStage boolean,
MobiliteInter boolean,
idenseignant int,
idemployer int,
primary key(idFormation,libelle)
);
insert into formation
values
('Licence1','TNSID',FALSE,FALSE,10,12),
('Licence1','Réseaux et télécommunications',FALSE,FALSE,9,20),
('Licence2','TNSID',FALSE,FALSE,7,25),
```

('Licence2','Réseaux et télécommunications',FALSE,FALSE,7,25),

('Licence3','TNSID',FALSE,FALSE,6,26),

('Licence3','Réseaux et télécommunications',FALSE,FALSE,1,21),

('Master1','TNSID',TRUE,FALSE,5,29),

('Master1','Data science',TRUE,FALSE,7,27),

('Master2','TNSID',TRUE,FALSE,3,17),

('Master2','Data science',TRUE,FALSE,4,19),

('Prépa1','Intégrée',TRUE,FALSE,5,15),

('Prépa1','Intégrée*',TRUE,FALSE,4,18),

('Prépa2','Intégrée',FALSE,FALSE,1,22),

('Prépa2','Intégrée*',FALSE,FALSE,9,23),

('Ingénieurie3','Génie industriel',TRUE,FALSE,10,24),

('Ingénieurie3','Informatique',TRUE,FALSE,4,16),

('Ingénieurie4','Informatique et cybersécurité',TRUE,TRUE,6,26),

('Ingénieurie4','Mécatronique',TRUE,TRUE,7,27),

('Ingénieurie5','Informatique et cybersécurité',TRUE,TRUE,8,28),

('Ingénieurie5','Mécatronique',TRUE,TRUE,9,29),

('DUT1','Télécommunications',TRUE,FALSE,3,30),

('DUT2','Informatique Indutriel',TRUE,FALSE,6,24);

create table universite(

iduniversite int,

nom varchar(50),

adresse varchar(50),

primary key(iduniversite)

);

insert into universite

values

(1,'UPHF/INSA','Valenciennces');

create table soutenance(

```sql
datesoutenance date,
idformation varchar(50),
primary key(datesoutenance)
);
insert into soutenance
values
('2022-04-01','Master2'),
('2015-08-01','Master1'),
('2022-05-01','Licence3'),
('2022-06-01','Prépa1'),
('2022-07-01','Ingénieurie3'),
('2015-07-01','Ingénieurie5'),
('2001-07-01','DUT1'),
('2018-07-01','Licence1'),
('2022-08-01','Licence2'),
('2017-07-01','Licence3'),
('2021-07-01','Prépa2'),
('2022-09-01','DUT2'),
('1992-07-01','Prépa2'),
('2021-08-01','Licence1'),
('2022-10-01','Ingénieurie4'),
('2020-07-01','Licence1'),
('2022-11-01','Prépa2'),
('2021-09-01','DUT1'),
('1983-07-01','Ingénieurie3'),
('1995-07-01','Master2');

create table respuniversitaire(
idenseignant int,
nom varchar(50),
prenom varchar(50),
```

```sql
iduniversite int,
primary key(idenseignant)
);
insert into respuniversitaire
values
(1,'Guy','Albert',1),
(2,'Leroy','Robert',1),
(3,'Carrefour','Jully',1),
(4,'Pouelle','Zac',1),
(5,'Sac','Lisa',1),
(6,'Duneaud','Paul',1),
(7,'Zemmour','Rose',1),
(8,'Lampard','Krous',1),
(9,'Baky','Sall',1),
(10,'Trump','zoé',1);


create table respindustriel(
idemployer int,
nom varchar(50),
prenom varchar(50),
identreprise int,
primary key(idemployer)
);
insert into respindustriel
values
(10,'Thilliez','François',1),
(11,'Basse','Françoise',10),
(12,'Pont','Leo',12),
(13,'Champ','Mari',3),
(14,'Seine','Eric',4),
(15,'Tor','jean',15),
```

(16,'Soulier','Ana',16),

(17,'Einstein','Albert',20),

(18,'Bourbon','Anthony',2),

(19,'Vans','Francisse',11),

(20,'Jordan','Michel',13),

(21,'Bac','François',9),

(22,'Basse','Françoise',19),

(23,'Pont','Leo',15),

(24,'Champ','Mari',14),

(25,'Seine','Eric',17),

(26,'Tor','jean',18),

(27,'Soulier','Ana',5),

(28,'Versier','Victor',8),

(29,'Bourbon','Anthony',19),

(30,'Vans','Francisse',20);

create table stage(

idstage int,

sujet varchar(50),

dureemin int,

dureemax int,

duree int,

primary key(idstage)

);

insert into stage

values

(1,'Stage ouvrier',1,12,2),

(2,'Stage de découverte',1,12,2),

(3,'Stage apprenti informatique',1,12,2),

(4,'Stage ouvrier',1,12,2),

(5,'Stage ouvrier',1,12,2),

```
(6,'Stage ouvrier',1,12,2),

(7,'Stage ouvrier',1,12,2),

(8,'Stage ouvrier',1,12,2),

(9,'Stage ouvrier',1,12,2),

(10,'Stage ouvrier',1,12,2),

(11,'Stage ouvrier',1,12,2),

(12,'Stage ouvrier',1,12,2),

(13,'Stage ouvrier',1,12,2),

(14,'Stage ouvrier',1,12,2),

(15,'Stage ouvrier',1,12,2),

(16,'Stage ouvrier',1,12,2),

(17,'Stage ouvrier',1,12,2),

(18,'Stage ouvrier',1,12,2),

(19,'Stage ouvrier',1,12,2),

(20,'Stage ouvrier',1,12,2);



create table entreprise(

identreprise int,

nom varchar(50),

adresse varchar(50),

replegal varchar(50),

contact int,

primary key(identreprise)

);

insert into entreprise

values

(1,'ATOS Worldline','Paris','Ulrich Tiono','0354675560'),

(2,'SALTO','Paris','Rimka Hector','0454675561'),

(3,'ARAMISAUTO','Paris','Canne Yazid','0554675562'),

(4,'BOUYGUE','Paris','Ferdinand Lopez','0654675563'),
```

```sql
(5,'SFR','Paris','Bella Abou','0754675564'),

(6,'PICARD','Paris','Poutch Riko','0854675565'),

(7,'CANDY','Paris','Helly lam','0954675566'),

(8,' BIC','Paris','Law JIN','1054675567'),

(9,' BOMBARDIER','Paris','Biquet Bouse','1154675568'),

(10,'SNCF','Paris','Madina de Moustique','1254675569'),

(11,'TOYOTA','Paris','LOUIS Morez','1354675570'),

(12,' FEED','Paris','Loic Lenz','1454675573'),

(13,'ATLAS','Paris','Alan Boole','1554675583'),

(14,'MAF','Paris','Pythagore Trame','1654675593'),

(15,'AIRFRANCE ','Paris','Noix Farida','1754675543'),

(16,'KAYAK ','Paris','Elsa Book','1854675533'),

(17,'NETFLIX ','Paris','Emry Val','1954675523'),

(18,'ALDI','Paris','Steck Candice','2054675513'),

(19,'PETIT-FRAIS','Paris','Roi Pierre','0154675553'),

(20,'AMAZON','Paris','Face Emmanuel','0254675503');


create table convention(

idconvention int,

datesignature date,

primary key(idconvention)

);

insert into convention

values

(20020512,'2022-01-01'),

(19921122,'2015-05-01'),

(20000601,'2022-02-01'),

(20030512,'2022-01-01'),

(20001205,'2022-04-01'),

(19900512,'2001-04-01'),

(19810512,'2018-04-01'),
```

(19970512,'2022-05-01'),

(20010902,'2017-04-01'),

(19960731,'2021-04-01'),

(20000512,'2022-06-01'),

(20020815,'1992-04-01'),

(19720428,'2021-05-01'),

(20021010,'2022-07-01'),

(19990303,'2020-04-01'),

(20000820,'2022-08-01'),

(20021112,'2021-06-01'),

(20010101,'2000-10-01'),

(19601204,'1983-04-01'),

(19700615,'1995-01-01');

create table realise_conv(

idconvention int,

iduniversite int,

primary key(idconvention,iduniversite),

foreign key(idconvention) references convention(idconvention),

foreign key (iduniversite) references universite(iduniversite)

);

insert into realise_conv

values

(20020512,1),

(19921122,1),

(20000601,1),

(20030512,1),

(20001205,1),

(19900512,1),

(19810512,1),

(19970512,1),

(20010902,1),

(19960731,1),

(20000512,1),

(20020815,1),

(19720428,1),

(20021010,1),

(19990303,1),

(20000820,1),

(20021112,1),

(20010101,1),

(19601204,1),

(19700615,1);

create table signe_conv(

idconvention int,

identreprise int,

primary key(idconvention,identreprise),

foreign key(idconvention) references convention(idconvention),

foreign key (identreprise) references entreprise(identreprise)

);

insert into signe_conv

values

(20020512,1),

(19921122,2),

(20000601,3),

(20030512,4),

(20001205,5),

(19900512,6),

(19810512,7),

(19970512,8),

(20010902,8),

(19960731,10),

(20000512,10),

(20020815,12),

(19720428,13),

(20021010,14),

(19990303,15),

(20000820,16),

(20021112,17),

(20010101,18),

(19601204,20),

(19700615,20);

create table propose(

libellestage varchar(50),

idformation varchar(50),

identreprise int,

primary key(idformation,identreprise),

foreign key(idformation) references formation(idformation),

foreign key(identreprise) references entreprise(identreprise)

);

insert into propose

values

('Stage ouvrier','Master2',1),

('Stage ouvrier','Master2',2),

('Stage ouvrier','Prépa2',3),

('Stage ouvrier','Master2',4),

('Stage ouvrier','Licence2',5),

('Stage ouvrier','DUT2',6),

('Stage ouvrier','DUT1',7),

('Stage ouvrier','Master1',8),

('Stage ouvrier','Master2',9),

```sql
('Stage ouvrier','Ingénieurie5',10),

('Stage ouvrier','Ingénieurie4',11),

('Stage ouvrier','Ingénieurie3',12),

('Stage ouvrier','Prépa2',13),

('Stage ouvrier','Prépa2',14),

('Stage ouvrier','Licence2',15),

('Stage ouvrier','Prépa1',16),

('Stage ouvrier','DUT1',17),

('Stage ouvrier','Licence1',18),

('Stage ouvrier','Master1',19),

('Stage ouvrier','Master2',20);


create table comprend(

idstage int,

idformation varchar(50),

remuneration int,

primary key(idstage,idformation),

foreign key(idformation) references formation(idformation),

foreign key(idstage) references stage(idstage)

);

insert into comprend

values

(1,'Master2',1000),

(2,'Master1',700),

(3,'Licence3',1200),

(4,'Prépa2',1000),

(5,'Ingénieurie3',900),

(6,'Ingénieurie5',1000),

(7,'DUT1',1000),

(8,'Licence1',700),

(9,'Licence2',800),
```

(10,'Licence3',1000),

(11,'Prépa2',900),

(12,'DUT2',700),

(13,'Prépa2',1000),

(14,'Licence1',1000),

(15,'Ingénieurie4',1000),

(16,'Licence1',1000),

(17,'Prépa2',1000),

(18,'DUT1',1000),

(19,'Ingénieurie3',600),

(20,'Master2',800);


```
create table estinclus(
iduniversite int,
idformation varchar(50),
libelle varchar(50),
primary key(iduniversite,idformation,libelle),
foreign key(iduniversite) references universite(iduniversite),
foreign key(idformation) references formation(idformation)
);
```
3)

a)

```
SELECT etudiant.nom,etudiant.prenom,etudiant.datenaissance
FROM  etudiant,formation,entreprise,signe_conv
WHERE etudiant.idformation=formation.idformation
AND etudiant.idconvention=signe_conv.idconvention
AND entreprise.identreprise=signe_conv.identreprise
AND entreprise.nom='ATOS Worldline' AND etudiant.annee=2021;
```

nom	prenom	datenaissance

b)

SELECT stage.sujet,entreprise.adresse,entreprise.contact

FROM stage,comprend,signe_conv,entreprise,formation,respindustriel,etudiant

WHERE etudiant.idformation=formation.idformation

AND respindustriel.identreprise=entreprise.identreprise

AND signe_conv.identreprise=entreprise.identreprise

AND etudiant.idconvention=signe_conv.idconvention

AND stage.idstage=comprend.idstage

AND comprend.idformation=etudiant.idformation

AND etudiant.annee=2020

AND formation.idformation='Master2' AND formation.libelle='TNSID'

AND respindustriel.nom='Thilliez';

	sujet	adresse	contact

c)

SELECT DISTINCT etudiant.nom,etudiant.prenom

FROM etudiant,convention,formation

WHERE etudiant.idformation=formation.idformation AND
etudiant.idconvention=convention.idconvention AND etudiant.annee=2022

AND convention.idconvention IN(SELECT idconvention FROM convention);

	nom	prenom
▶	Luzieux	Clara
	Tassembedo	Ayman
	Faye	Hanes
	Thiam	Pape
	Vercier	Roman
	Sanchez	Alex
	Poubelle	Eugène
	Ba	Sadio

d)

SELECT etudiant.nom,etudiant.prenom,etudiant.idformation,formation.libelle

FROM etudiant,convention,formation

WHERE etudiant.idformation=formation.idformation

AND etudiant.idconvention=convention.idconvention

AND etudiant.annee=2022 AND formation.necessitestage=TRUE

AND convention.idconvention IN (SELECT idconvention FROM convention);

nom	prenom	idformation	libelle
Luzieux	Clara	Master2	TNSID
Faye	Hanes	Prépa1	Intégrée
Faye	Hanes	Prépa1	Intégrée*
Thiam	Pape	Ingénieurie3	Génie industriel
Thiam	Pape	Ingénieurie3	Informatique
Sanchez	Alex	DUT2	Informatique Indutriel
Poubelle	Eugène	Ingénieurie4	Informatique et cybersécurité
Poubelle	Eugène	Ingénieurie4	Mécatronique

Result 17 ✕

e)

SELECT etudiant.nom,etudiant.prenom,etudiant.datenaissance

FROM etudiant,formation,comprend

WHERE comprend.idformation=formation.idformation AND
etudiant.idformation=formation.idformation AND comprend.remuneration=(SELECT
MAX(remuneration) FROM comprend,formation WHERE
comprend.idformation=formation.idformation AND etudiant.annee=2008);

nom	prenom	datenaissance

f)

SELECT AVG(remuneration),formation.libelle

FROM comprend,formation

WHERE comprend.idformation=formation.idformation AND (formation.idformation='Ingénieurie3'
OR formation.idformation='Ingénieurie4' OR formation.idformation='Ingénieurie5')

GROUP BY formation.libelle;

AVG(remuneration)	libelle
750.0000	Génie industriel
750.0000	Informatique
1000.0000	Informatique et cybersécurité
1000.0000	Mécatronique

g)

SELECT count(*),formation.libelle

FROM etudiant,formation

WHERE etudiant.idformation=formation.idformation

GROUP BY formation.libelle;

▶	3	Data science
	9	TNSID
	6	Réseaux et télécommunications
	4	Intégrée
	4	Intégrée*
	2	Génie industriel
	2	Informatique
	2	Informatique et cybersécurité
	2	Mécatronique
	2	Télécommunications
	1	Informatique Indutriel

h)

SELECT etudiant.nom,etudiant.prenom

FROM etudiant

WHERE etudiant.nom IN (SELECT respindustriel.nom FROM respindustriel,signe_conv,formation WHERE respindustriel.identreprise=signe_conv.identreprise AND formation.idemployer=respindustriel.idemployer);

	nom	prenom
▶	Einstein	Albert

i)

SELECT entreprise.nom,count(*)

FROM entreprise,signe_conv

WHERE entreprise.identreprise=signe_conv.identreprise

GROUP BY entreprise.nom

ORDER BY count(*) DESC

LIMIT 1;

	nom	count(*)
▶	AMAZON	2

j)

SELECT AVG(stage.duree)

FROM stage

WHERE stage.duree IS NOT NULL;

	AVG(stage.duree)
▶	2.0000

k)

SELECT *

FROM entreprise

WHERE identreprise NOT IN (

SELECT identreprise

FROM etudiant,signe_conv,convention,formation

WHERE etudiant.idconvention=convention.idconvention

AND signe_conv.idconvention=convention.idconvention

AND etudiant.idformation=formation.idformation

AND (formation.idformation='Ingénieurie3' OR formation.idformation='Ingénieurie4' OR formation.idformation='Ingénieurie5'));

	identreprise	nom	adresse	replegal	contact
▶	1	ATOS Worldline	Paris	Ulrich Tiono	354675560
	2	SALTO	Paris	Rimka Hector	454675561
	3	ARAMISAUTO	Paris	Canne Yazid	554675562
	4	BOUYGUE	Paris	Ferdinand Lopez	654675563
	7	CANDY	Paris	Helly lam	954675566
	8	BIC	Paris	Law JIN	1054675567
	9	BOMBARDIER	Paris	Biquet Bouse	1154675568
	10	SNCF	Paris	Madina de Moustique	1254675569
	11	TOYOTA	Paris	LOUIS Morez	1354675570
	12	FEED	Paris	Loic Lenz	1454675573
	13	ATLAS	Paris	Alan Boole	1554675583
	14	MAF	Paris	Pythagore Trame	1654675593
	16	KAYAK	Paris	Elsa Book	1854675533
	17	NETFLIX	Paris	Emry Val	1954675523
	18	ALDI	Paris	Steck Candice	2054675513
	19	PETIT-FRAIS	Paris	Roi Pierre	154675553
*	NULL	NULL	NULL	NULL	NULL

l)

SELECT count(*)

FROM etudiant

WHERE idetudiant IN (SELECT idetudiant FROM signe_conv,formation,propose WHERE formation.idformation=propose.idformation AND propose.identreprise=signe_conv.identreprise);

count(*)
20

m)

SELECT *

FROM entreprise

WHERE entreprise.identreprise IN (

SELECT entreprise.identreprise

FROM entreprise,signe_conv,etudiant,convention

WHERE entreprise.identreprise=signe_conv.identreprise

AND etudiant.idconvention=convention.idconvention

AND signe_conv.idconvention=etudiant.idconvention

GROUP BY etudiant.idformation HAVING count(*)>=3);

identreprise	nom	adresse	replegal	contact
8	BIC	Paris	Law JIN	1054675567
10	SNCF	Paris	Madina de Moustique	1254675569
NULL	NULL	NULL	NULL	NULL

n)

SELECT *,idetudiant

FROM stage,etudiant,comprend

WHERE stage.idstage=comprend.idstage AND etudiant.idformation=comprend.idformation

GROUP BY etudiant.idetudiant;

idstage	sujet	dureemin	dureemax	duree	idetudiant	nom	prenom	datenaissance	annee	idconvention	idformation	idstage	idformation
1	Stage ouvrier	1	12	2	1	Luzieux	Clara	2002-05-12	2022	20020512	Master2	1	Master2
2	Stage de découverte	1	12	2	2	Hien	Albert	1992-11-22	2015	19921122	Master1	2	Master1
3	Stage apprenti informatique	1	12	2	3	Tassembedo	Ayman	2000-06-01	2022	20000601	Licence3	3	Licence3
5	Stage ouvrier	1	12	2	5	Thiam	Pape	2000-12-05	2022	20001205	Ingénieurie3	5	Ingénieurie3
6	Stage ouvrier	1	12	2	6	Dieng	Fallou	1990-05-12	2015	19900512	Ingénieurie5	6	Ingénieurie5
7	Stage ouvrier	1	12	2	7	Ka	Demba	1981-05-12	2001	19810512	DUT1	7	DUT1
8	Stage ouvrier	1	12	2	8	Vincent	Julien	1997-05-12	2018	19970512	Licence1	8	Licence1
9	Stage ouvrier	1	12	2	9	Vercier	Roman	2001-09-02	2022	20010902	Licence2	9	Licence2
3	Stage apprenti informatique	1	12	2	10	Rashford	Isabelle	1996-07-31	2017	19960731	Licence3	3	Licence3
4	Stage ouvrier	1	12	2	11	Maidana	Pedro	2000-05-12	2021	20000512	Prépa2	4	Prépa2
12	Stage ouvrier	1	12	2	12	Sanchez	Alex	2002-08-15	2022	20020815	DUT2	12	DUT2
4	Stage ouvrier	1	12	2	13	Gatto	Elisa	1972-04-28	1992	19720428	Prépa2	4	Prépa2
8	Stage ouvrier	1	12	2	14	Boulanger	Elias	2002-10-10	2021	20021010	Licence1	8	Licence1
15	Stage ouvrier	1	12	2	15	Poubelle	Eugène	1999-03-03	2022	19990303	Ingénieurie4	15	Ingénieurie4
8	Stage ouvrier	1	12	2	16	Sy	Oumar	2000-08-20	2020	20000820	Licence1	8	Licence1
4	Stage ouvrier	1	12	2	17	Ba	Sadio	2002-11-12	2022	20021112	Prépa2	4	Prépa2
7	Stage ouvrier	1	12	2	18	Tricot	Ines	2001-01-01	2021	20010101	DUT1	7	DUT1
5	Stage ouvrier	1	12	2	19	Varin	Leo	1960-12-04	1983	19601204	Ingénieurie3	5	Ingénieurie3

o)

SELECT *

FROM entreprise

WHERE identreprise IN (

SELECT entreprise.identreprise,etudiant.idformation

FROM entreprise,signe_conv,etudiant,convention

WHERE entreprise.identreprise=signe_conv.identreprise

AND convention.idconvention=etudiant.idconvention

AND signe_conv.idconvention=etudiant.idconvention

AND (etudiant.annee=2022 OR etudiant.annee=2021) GROUP BY etudiant.idformation);

identreprise	nom	adresse	replegal	contact
1	ATOS Worldline	Paris	Ulrich Tiono	354675560
3	ARAMISAUTO	Paris	Canne Yazid	554675562
4	BOUYGUE	Paris	Ferdinand Lopez	654675563
5	SFR	Paris	Bella Abou	754675564
8	BIC	Paris	Law JIN	1054675567
10	SNCF	Paris	Madina de Moustique	1254675569
12	FEED	Paris	Loic Lenz	1454675573
14	MAF	Paris	Pythagore Trame	1654675593
15	AIRFRANCE	Paris	Noix Farida	1754675543
17	NETFLIX	Paris	Emry Val	1954675523
18	ALDI	Paris	Steck Candice	2054675513
NULL	NULL	NULL	NULL	NULL

p)

SELECT nom,prenom

FROM etudiant,comprend,formation,signe_conv

WHERE comprend.idformation=formation.idformation

AND etudiant.idformation=formation.idformation

AND signe_conv.idconvention=etudiant.idconvention

AND comprend.remuneration=(SELECT MAX(remuneration) FROM comprend WHERE remuneration IS NOT NULL);

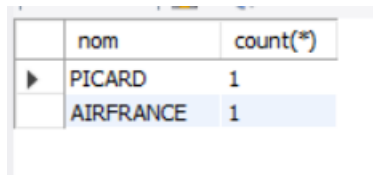| nom	prenom
Tassembedo	Ayman
Rashford	Isabelle

q)

SELECT entreprise.nom,count(*)

FROM entreprise,signe_conv,etudiant,convention,formation

WHERE entreprise.identreprise=signe_conv.identreprise

AND etudiant.idconvention=convention.idconvention

AND signe_conv.idconvention=convention.idconvention

AND etudiant.idformation=formation.idformation

AND formation.libelle='Informatique et cybersécurité'

GROUP BY entreprise.nom

ORDER BY count(*) DESC

LIMIT 10;

	nom	count(*)
▶	PICARD	1
	AIRFRANCE	1

4)

a)

create view stagiairesannee(nom,prenom,annee) as

select etudiant.nom,etudiant.prenom,etudiant.annee

from etudiant,formation,signe_conv

where etudiant.idformation=formation.idformation

and etudiant.idconvention=signe_conv.idconvention

group by formation.libelle;

b)

create view elevesingenieurs(nom,prenom) as

select etudiant.nom,etudiant.prenom

from etudiant,formation,signe_conv

where etudiant.idformation=formation.idformation

and signe_conv.idconvention=etudiant.idconvention

and formation.mobiliteinter=TRUE

and necessitestage=TRUE

and (formation.idformation='Ingénieurie4' or formation.idformation='Ingénieurie5');

c)

create view anciensetudiantsrecruites(nom,prenom) as

select etudiant.nom,etudiant.prenom

from etudiant,respindustriel,entreprise,signe_conv

where etudiant.idconvention=signe_conv.idconvention

and respindustriel.identreprise=entreprise.identreprise

and signe_conv.identreprise=entreprise.identreprise

and etudiant.nom in(select respindustriel.nom from entreprise,respindustriel where entreprise.identreprise=respindustriel.identreprise);