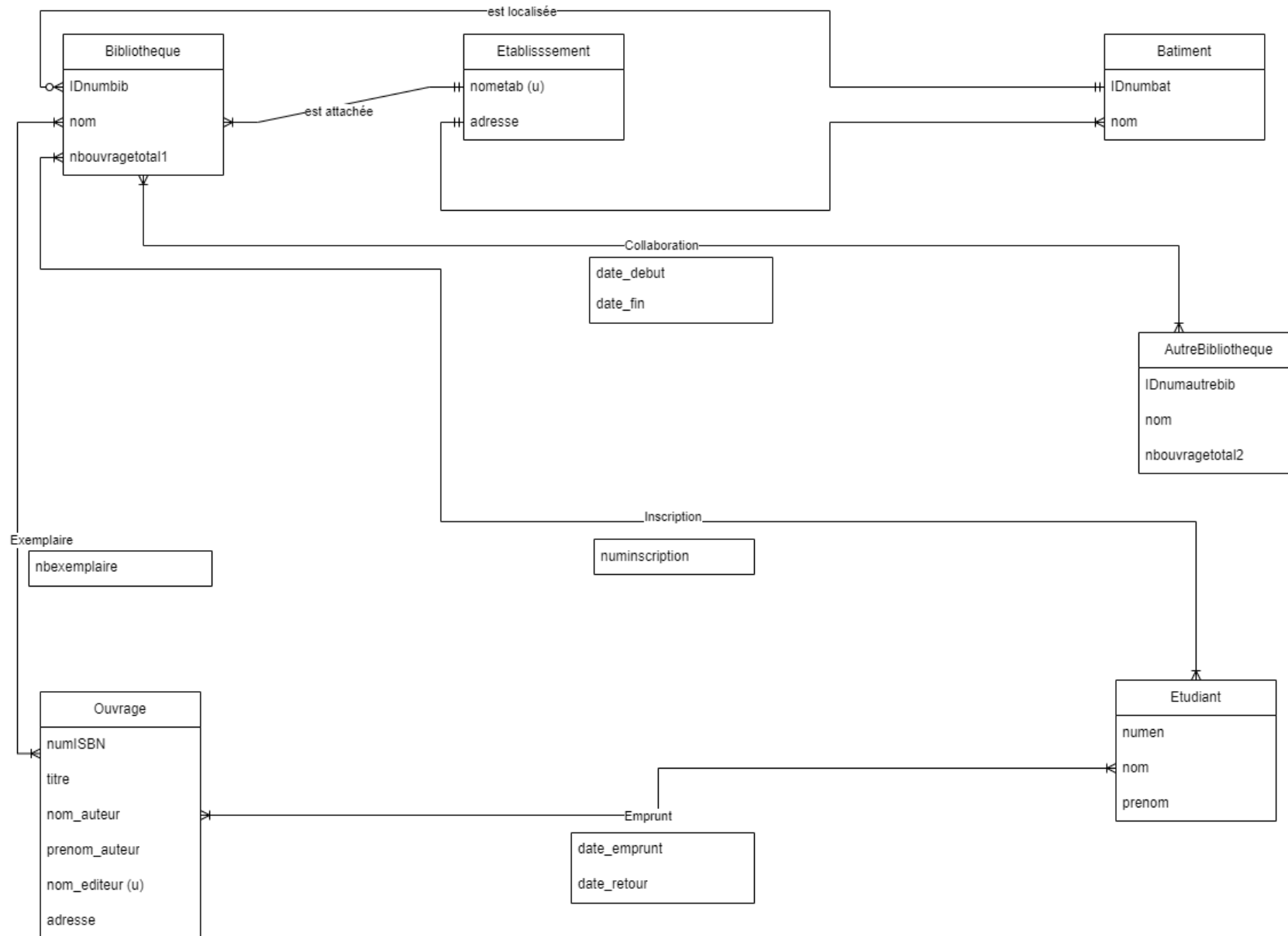
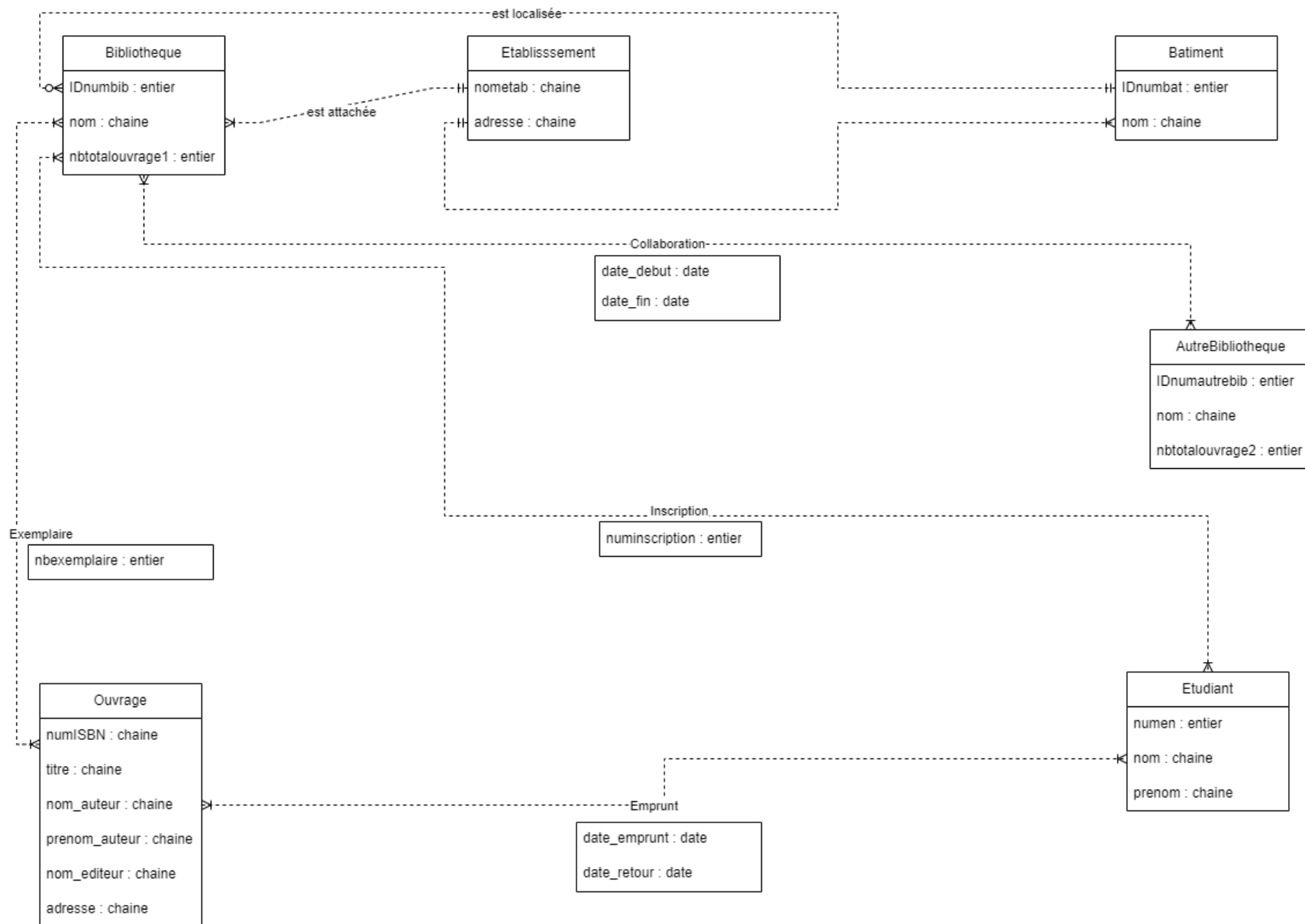


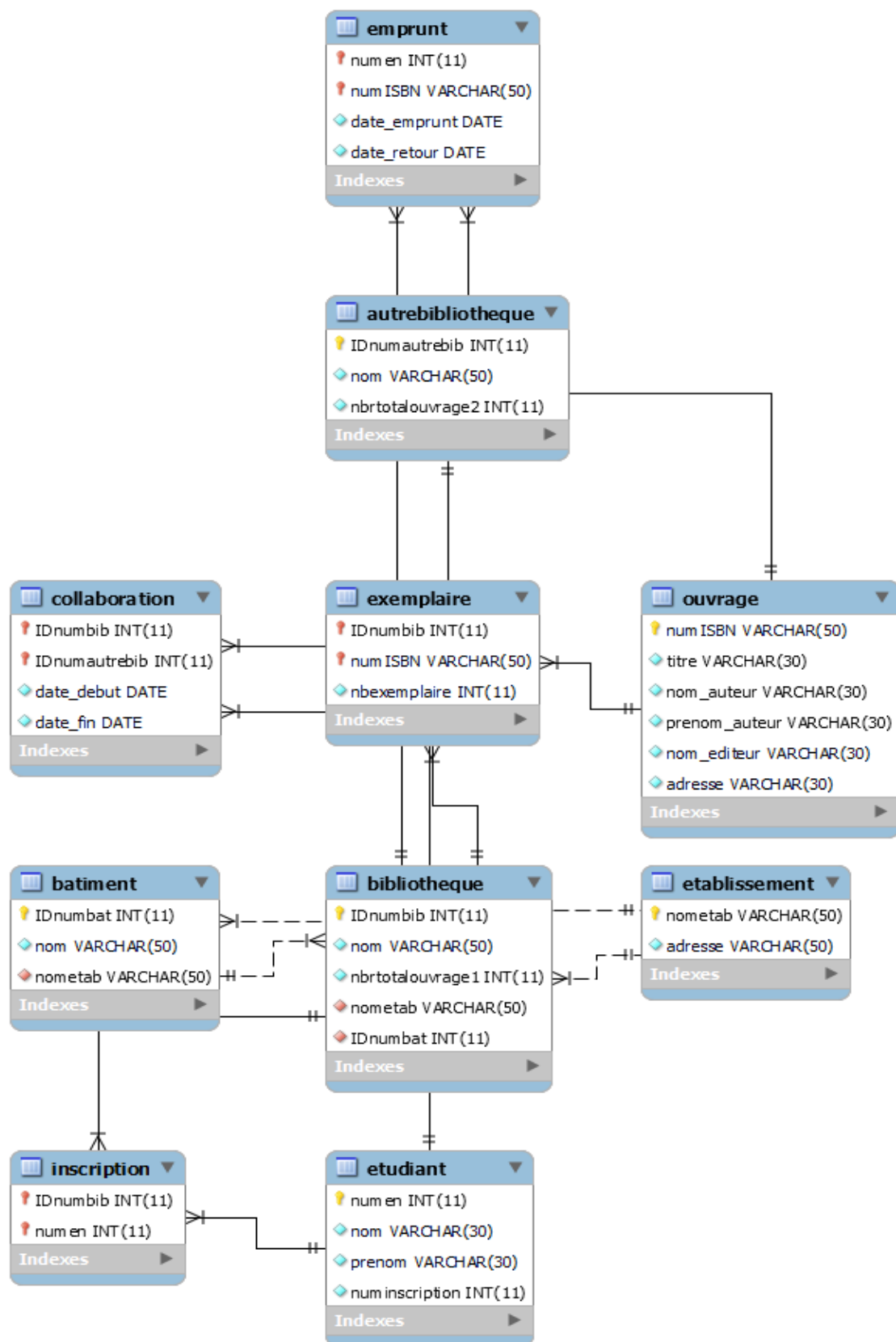
HADJE ACHE MAHAMAT GARBA

NICK TCHIAKPE

L2 - MIAGE







MODELE PHYSIQUE

Etablissement (nometab, adresse) ;

EN INTENTION

Etudiants (numen, nom, prenom, numinscription) ;

Batiment (IDnumbat, nom, ~~#nometab~~) ;

Bibliotheque (IDnumbib, nom, nbrtotalouvrage1, ~~#nometab~~, ~~#numbat~~) ;

AutreBibliotheque (IDnumautrebib, nom, nbrtotalouvrage2) ;

Collaboration (~~#IDnumbib~~, ~~#IDnumautrebib~~, date_debut, date_fin) ;

Ouvrage (numISBN, titre, nom_auteur, prenom_auteur, nom_editeur, adresse) ;

Exemplaire (~~#IDnumbib~~, ~~#numISBN~~, nbexemplaire) ;

Emprunt (#numISBN, #numen, date_emprunt, date_retour) ;

Inscription (#IDnumbib, #numen)



MODELE EN EXTENSION

ETABLISSEMENT

nom	adresse
IDMC	22 quai choiseul
Campus Lettre	14 rue bel
UL	26 rue de Saurupt
Artem	99 rue de Metz
IAE	40 rue de Miel

ETUDIANTS

numen	nom	prenom
3221	Ichass	Garba
3887	Nick	Tchiakpe
3441	Hakim	Siameur
3998	Seid	Ali
3221	Fatima	Sow

BATIMENT

IDnumbat	nom	nometab
1	A	Campus Lettre
2	B	UL
3	C	Artem
4	D	IDMC
5	E	IAE

BIBLIOTHEQUE

IDnumbib	nom	nbrtotalouvrage1	nometab	IDnumbat
35456	BU Management	12563	IAE	5
32599	e-BU Manufacture	11457	UL	2
47145	Stanislas	14857	UL	1
59643	BU Sciences	9456	IDMC	4
65322	BU Histoire	22053	Artem	3

AUTREBIBLIOTHEQUE

IDnumautrebib	nom	nbrtotalouvrage2
1	Liberation	2565
2	Avenue	14563
3	Ombelles	12225
4	Anarchie	10247

5	Morale	8547
---	--------	------

COLLABORATION

IDnumbib	IDnumautrebib	date_debut	date_fin
35456	1	21-12-23	21-12-25
32599	2	14-05-23	14-05-25
47145	3	16-10-23	16-10-24
59643	4	06-03-20	02-01-24
65322	5	04-02-23	05-04-2027

OUVRAGE

numISBN	titre	nom_auteur	prenom_auteur	nom_editeur	adresse
978-2-463-01627-2	L'affaire Bissi	Barnabé-Akayi	Daté Atavito	Ruisseaux d'Afrique	Cotonou
978-2-426-00452-2	Un piège sans fin	Bhêly-Quenum	Olympe	Présence Africaine	Paris
978-2-426-00627-4	L'aube nouvelle	Dagnon	Gilbert Jean	Bénin Horizons	Cotonou
978-2-426-00627-7	Entre justice et vengeance	Garcia	Jean	Columbus	Paris
978-2-426-00627-30	La longue attente	Perrier	Onel	Phylliplume	Marseille

EXEMPLAIRE

IDnumbib	numISBN	nbexemplaire
35456	978-2-426-00627-7	143
35456	978-2-426-00452-2	226
32599	978-2-463-01627-2	445
32599	978-2-426-00627-30	12
47145	978-2-463-01627-2	257
47145	978-2-426-00452-2	144
47145	978-2-426-00627-4	58
47145	978-2-426-00627-7	89
47145	978-2-426-00627-30	147
59643	978-2-426-00627-7	547
59643	978-2-463-01627-2	214
65322	978-2-463-01627-2	112
65322	978-2-426-00627-30	25

EMPRUNT

numISBN	numen	date_emprunt	date_retour
978-2-463-01627-2	3221	22-12-23	22-01-24
978-2-426-00452-2	3887	14-12-23	14-01-24
978-2-426-00627-4	3441	29-11-23	29-12-23
978-2-426-00627-7	3998	11-12-23	11-01-24
978-2-426-00627-30	3221	04-12-23	04-11-24

INSCRIPTION

IDnumbib	numen	numinscription
35456	3221	4578
47145	3887	5269
59643	3441	8963
65322	3998	7777
32599	3221	8888


```

CREATE DATABASE IF NOT EXISTS `tpMHTN`;

USE `tpMHTN`;

CREATE TABLE IF NOT EXISTS `Etablissement` (
  `nometab` varchar(50) NOT NULL,
  `adresse` varchar(50) NOT NULL,
  PRIMARY KEY (`nometab`)
);

INSERT INTO `Etablissement` (`nometab`, `adresse`)
VALUES ('IDMC', '22 quai choiseul'),
      ('Campus Lettre', '14 rue bel'),
      ('UL', '26 rue de Saurupt'),
      ('Artem', '99 rue de Metz'),
      ('IAE', '40 rue de Miel');

```

```

CREATE TABLE IF NOT EXISTS `Etudiant` (
  `numen` int NOT NULL,
  `nom` varchar(30) NOT NULL,
  `prenom` varchar(30) NOT NULL,
  PRIMARY KEY(`numen`)
);

INSERT INTO Etudiant (`numen`, `nom`, `prenom`)
VALUES
(3221, 'Ichass', 'Garba'),
(3887, 'Nick', 'Tchiakpe'),
(3441, 'Hakim', 'Siameur'),
(3998, 'Seid', 'Ali'),
(3251, 'Fatima', 'Sow');

```

```

CREATE TABLE IF NOT EXISTS `Batiment` (

```

```

`IDnumbat` int NOT NULL,
`nom` varchar(50) NOT NULL,
`nometab` varchar(50) NOT NULL,
PRIMARY KEY (`IDnumbat`),
FOREIGN KEY (`nometab`) REFERENCES `Etablissement`(`nometab`)
);

```

```

INSERT INTO `Batiment` (`IDnumbat`,`nom`,`nometab`)
VALUES (1,'A','Campus Lettre'),
(2,'B','UL'),
(3,'C','Artem'),
(4,'D','IDMC'),
(5,'E','IAE');

```

```

CREATE TABLE IF NOT EXISTS `Bibliotheque` (
`IDnumbib` int NOT NULL,
`nom` varchar(50) NOT NULL ,
`nbrtotalouvrage1` int NOT NULL,
`nometab` varchar(50) NOT NULL,
`IDnumbat` int NOT NULL,
PRIMARY KEY(`IDnumbib`),
FOREIGN KEY (`nometab`) REFERENCES `Etablissement`(`nometab`),
FOREIGN KEY (`IDnumbat`) REFERENCES `Batiment`(`IDnumbat`)
);

```

```

INSERT INTO `Bibliotheque` (`IDnumbib`,`nom`,`nbrtotalouvrage1`,`nometab`,`IDnumbat`)
VALUES (35456,'BU Management',12563,'IAE',5),
(32599,'e-BU Manufacture',11457,'UL',2),
(47145,'Stanislas',14857,'UL',1),

```

```
(59643,'BU Sciences',9456,'IDMC',4),  
(65322,'BU Histoire',22053,'Artem',3);
```

```
CREATE TABLE IF NOT EXISTS `AutreBibliotheque`(  
  `IDnumautrebib` int NOT NULL,  
  `nom` varchar(50) NOT NULL ,  
  `nbrtotalouvrage2` int NOT NULL,  
  PRIMARY KEY(`IDnumautrebib`)  
);
```

```
INSERT INTO `AutreBibliotheque` (`IDnumautrebib`,`nom`,`nbrtotalouvrage2`)  
VALUES (1,'Liberation',2565),  
(2,'Avenue',14563),  
(3,'Ombelles',12225),  
(4,'Anarchie',10247),  
(5,'Morale',8547);
```

```
CREATE TABLE IF NOT EXISTS `Collaboration` (  
  `IDnumbib` int NOT NULL,  
  `IDnumautrebib` int NOT NULL,  
  `date_debut` date NOT NULL,  
  `date_fin` date NOT NULL,  
  
  FOREIGN KEY (`IDnumbib`) REFERENCES `Bibliotheque`(`IDnumbib`),  
  FOREIGN KEY (`IDnumautrebib`) REFERENCES `AutreBibliotheque`(`IDnumautrebib`),  
  PRIMARY KEY (`IDnumbib`,`IDnumautrebib`)  
);
```

```

INSERT INTO `Collaboration` (`IDnumbib`,`IDnumautrebib`,`date_debut`,`date_fin`)
VALUES
(35456,1,'2023-12-21','2025-12-21'),
(32599,2,'2023-05-14','2025-05-14'),
(47145,3,'2023-10-16','2024-10-16'),
(59643,4,'2020-03-06','2024-01-02'),
(65322,5,'2023-02-04','2027-04-05');

```

```

CREATE TABLE IF NOT EXISTS `Ouvrage` (
    `numISBN` varchar(50) NOT NULL,
    `titre` varchar(30) NOT NULL,
    `nom_auteur` varchar(30) NOT NULL,
    `prenom_auteur` varchar(30) NOT NULL,
    `nom_editeur` varchar(30) NOT NULL,
    `adresse` varchar(30) NOT NULL,
    PRIMARY KEY (`numISBN`)
);

```

```

INSERT INTO `OUVRAGE` (`numISBN`,`titre`,`nom_auteur`,`prenom_auteur`,`nom_editeur`,`adresse`)
values
('978-2-426-00627-2','L'affaire Bissi','Barnabé-Akayi','Daté Atavito','Ruisseaux d'Afrique','Cotonou'),
('978-2-426-00452-2','Un piège sans fin ','Bhêly-Quenum','Olympe','Présence Africaine','Paris'),
('978-2-426-00627-4','L'aube nouvelle','Dagnon','Gilbert Jean','Bénin Horizons','Cotonou'),
('978-2-426-00627-7','Entre justice et vengeance','Garcia','Jean','Columbus','Paris'),
('978-2-426-00627-30','La longue attente','Perrier','Onel',' Philliplume','Marseille');

```

```

CREATE TABLE IF NOT EXISTS `Exemplaire` (
    `IDnumbib` int NOT NULL,

```

```

`numISBN` varchar(50) NOT NULL,
`nbexemplaire` int NOT NULL,
    PRIMARY KEY(`IDnumbib`, `numISBN`),
    FOREIGN KEY(`IDnumbib`) REFERENCES `Bibliotheque`(`IDnumbib`),
    FOREIGN KEY(`numISBN`) REFERENCES `Ouvrage`(`numISBN`)
);

```

```

INSERT INTO `Exemplaire` (`IDnumbib`, `numISBN`, `nbexemplaire`)
VALUES (35456,'978-2-426-00627-7',143),
(35456,'978-2-426-00452-2',226),
(32599,'978-2-426-00627-2',445),
(32599,'978-2-426-00627-30',12),
(47145,'978-2-426-00627-2',257),
(47145,'978-2-426-00452-2',144),
(47145,'978-2-426-00627-4',58),
(47145,'978-2-426-00627-7',89),
(47145,'978-2-426-00627-30',147),
(59643,'978-2-426-00627-7',547),
(59643,'978-2-426-00627-2',214),
(65322,'978-2-426-00627-2',112),
(65322,'978-2-426-00627-30',25);

```

```

CREATE TABLE IF NOT EXISTS `Emprunt` (
    `numen` int NOT NULL,
    `numISBN` varchar(50) NOT NULL,
    `date_emprunt` date NOT NULL,
    `date_retour` date NOT NULL,
    PRIMARY KEY(`numen`, `numISBN`),
    FOREIGN KEY(`numen`) REFERENCES `Etudiant`(`numen`),
    FOREIGN KEY(`numISBN`) REFERENCES `Ouvrage`(`numISBN`)
);

```

```
INSERT INTO `Emprunt`(`numISBN`, `numen`, `date_emprunt`, `date_retour`)
VALUES
('978-2-426-00627-2',3221,'2023-12-22','2024-01-22'),
('978-2-426-00452-2',3887,'2023-12-14','2024-01-14'),
('978-2-426-00627-4',3441,'2023-11-29','2023-12-29'),
('978-2-426-00627-7',3998,'2023-12-11','2024-01-11'),
('978-2-426-00627-30',3251,'2023-12-04','2024-11-04');
```

```
CREATE TABLE IF NOT EXISTS `Inscription` (
    `IDnumbib` int NOT NULL,
    `numen` int NOT NULL,
    `numinscription` int NOT NULL,
    PRIMARY KEY(`IDnumbib`,`numen`),
    FOREIGN KEY(`IDnumbib`) REFERENCES `Bibliotheque`(`IDnumbib`),
    FOREIGN KEY(`numen`) REFERENCES `Etudiant`(`numen`)
);
```

```
INSERT INTO `Inscription` (`IDnumbib`, `numen`, `numinscription`)
VALUES
(35456,3221, 4578),
(47145,3887, 5269),
(59643,3441, 8963),
(65322,3998, 7777),
(32599,3221, 8888);
```

USE tpMHTN;

SELECT IDnumbib,nom from Bibliotheque ;

SELECT IDnumbib,nom from Bibliotheque where nbrtotalouvrage1>10000;

SELECT e.nometab,b.nom FROM Etablissement e,Bibliotheque b where e.nometab= b.nometab and b.nom = "Stanislas";

SELECT COUNT(*) FROM bibliotheque WHERE nometab = 'UL';

SELECT AVG(nbrtotalouvrage1) FROM Bibliotheque;

SELECT AVG(nbrtotalouvrage2) FROM AutreBibliotheque;

SELECT nometab, COUNT(*)FROM Bibliotheque GROUP BY nometab;

SELECT nometab FROM Bibliotheque group by nometab order by COUNT(*) DESC LIMIT 1;

SELECT b.nom, e.nometab FROM Bibliotheque b, Etablissement e, Ouvrage o, Exemplaire x where b.nometab = e.nometab AND b.IDnumbib = x.IDnumbib AND o.numISBN = x.numISBN AND o.numISBN = '978-2-426-00627-2'