TP1- Administration des BDD Sous SQL Server

Etudiant:

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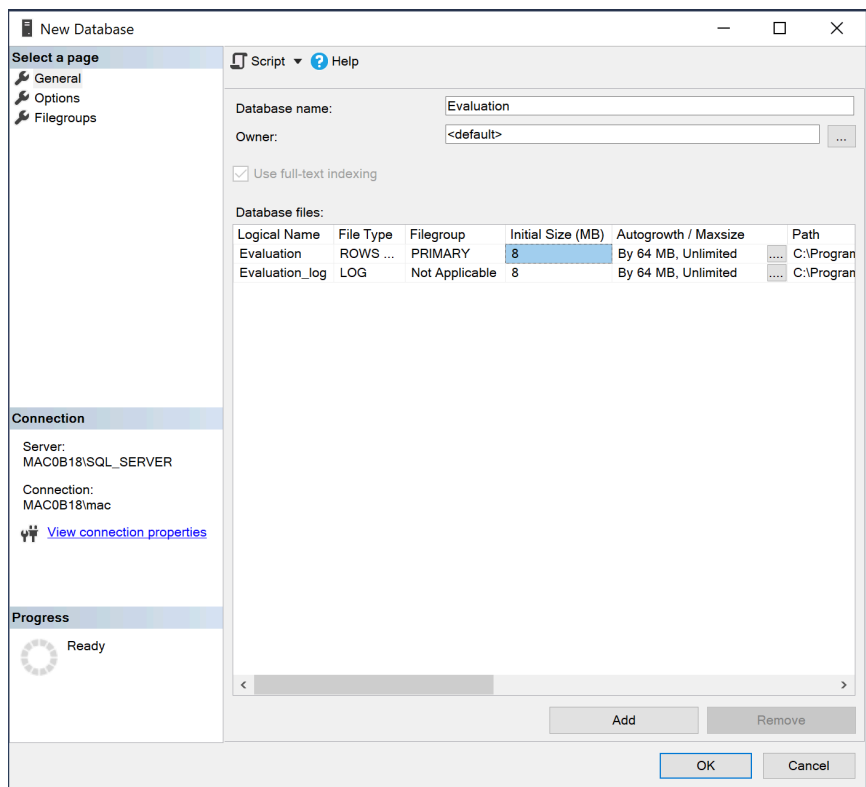EL KARMY Othmane

filiere : GL

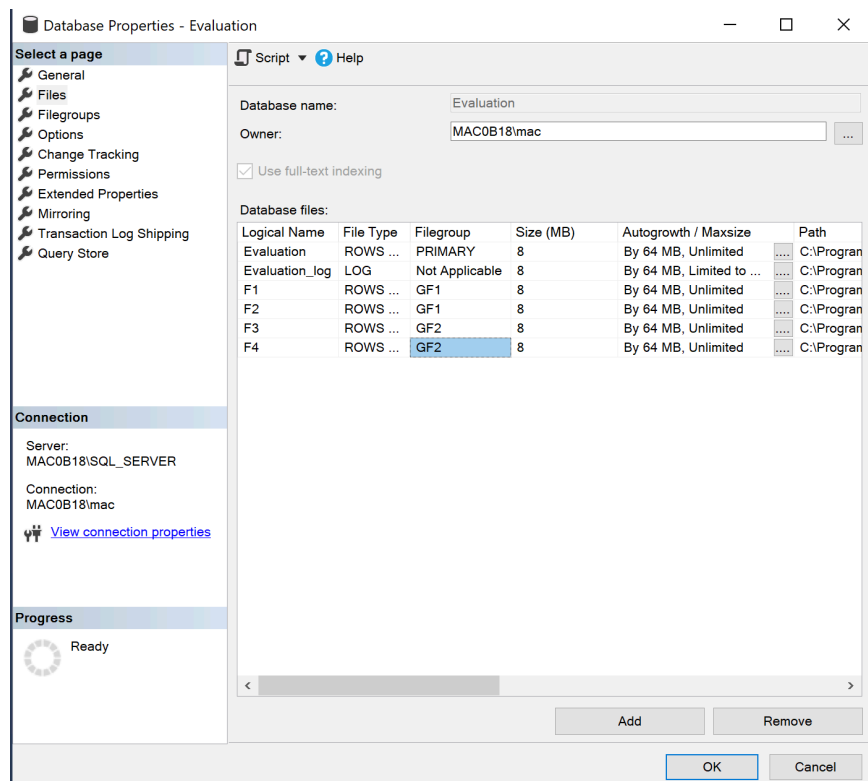**Formateur:**

Pr. A. ETTALBI

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1. Creer la BDD

Creation des fichiers secondaires

Rendre le GF1 le groupe de fichiers par défaut

Name	Files	Read-Only	Default	Autogrow All Files
PRIMARY	1		☐	☐
GF1	2	☐	☑	☐
GF2	2	☐	☐	☐

F1, F2, F3, F4 a une extension .ndf

2. Creation des tables

MAC0B18\SQL_SERV...ion - dbo.Table_1*

Column Name	Data Type	Allow Nulls
Code	int	☑
Nom	varchar(12)	☑
Prenom	varchar(12)	☑
Classe	varchar(15)	☑
		☐

Properties

[Tbl] dbo.Etudiant

⊟ **(Identity)**	
(Name)	Etudiant
Database Name	Evaluation
Description	
Schema	dbo
Server Name	mac0b18\sq
⊟ **Table Designer**	
Identity Column	
Indexable	Yes
Lock Escalation	Table
⊞ Regular Data Space	GF1
Replicated	No
Row GUID Column	
Text/Image Filegro	GF1

Column Name	Data Type	Allow Nulls
Code	int	☑
Code_Etud	char(10)	☑
Code_Mat	char(5)	☑
Date_Ex	datetime	☑
Note	decimal(4, 2)	☑
		☐

Column Name	Data Type	Allow Nulls
Code	int	☑
Code_Etud	char(10)	☑
Code_Mat	char(5)	☑
Date_Ex	datetime	☑
Note	decimal(4, 2)	☑
		☐

3. La table Examen sera stockée sur les deux fichiers F3 et F4

4. Const1, Const2, Const3:

Column Name	Data Type	Allow Nulls
Code	char(5)	☐

Const4:

Tables and Columns ? ✕

Relationship name:

FK_Examen_Etudiant

Primary key table:

Etudiant ∨

Foreign key table:

Examen

Code	Code_Etud

Const5 :

Relationship name:

FK_Examen_Matiere

Primary key table:	Foreign key table:
Matiere	Examen
Code	Code_Mat

Const6 :

Check Constraints

Selected Check Constraint:

CK_Examen

Editing properties for existing check constraint.

(General)	
Expression	([Date_Ex]<=getdate())
Identity	
(Name)	CK_Examen
Description	
Table Designer	
Check Existing Data (	Yes
Enforce For INSERTs	Yes
Enforce For Replicati	Yes

Add   Delete   Close

Const7 :

Selected Check Constraint:

CK_Examen
CK_Note*

Editing properties for new check constraint. The 'Expression' property needs to be filled in before the new check constraint will be accepted.

˅ (General)		
Expression	[Note]>=(0) AND [Note]<=(20)	
˅ Identity		
(Name)	CK_Note	
Description		
˅ Table Designer		
Check Existing Data (	Yes	
Enforce For INSERTs	Yes	
Enforce For Replicati(	Yes	

[Add]   [Delete]   [Close]

5.

	Code	Nom	Preno...	Classe
	1	ABIDI	AHMED	2GL-G1
	2	BENB...	SAID	2GL-G3
	3	BOUS...	HALI...	2GL-G1
▶*	NULL	NULL	NULL	NULL

6.

	Code	Nom	Coef
	M2.1	Reseaux Info ...	3
	M2.2	Administration ...	3
	M2.3	Communication...	2
▶*	NULL	NULL	NULL

7.

Code	Code…	Code…	Date_…	Note
1	1	M2.1	2022-…	10,00
2	1	M2.2	2022-…	19,00
3	1	M2.3	2022-…	17,00
4	2	M2.1	2022-…	13,00
5	2	M2.2	2022-…	15,40
6	2	M2.3	2022-…	16,00
7	3	M2.1	2022-…	16,00
8	3	M2.2	2022-…	14,00
9	3	M2.3|	2022-…	18,00
NULL	NULL	NULL	NULL	NULL

8.

A}✔

B}✔

C)✘ violation de la contrainte primary key

D)✔

E)✘ violation de la contrainte foreign key FK_Matiere

F)✘ violation de la contrainte note (note between 0 and 20)

G)✔

H)✘ violation de la contrainte date_exam (Date_Ex <= getdate())

9.

```
Select * from Etudiant;

Select * from Matiere;

Select * from Examen;
```

	Code	Nom	Prenom	Classe
1	1	ABIDI	AHMED	2GL-G1
2	2	BENBRAHIM	SAID	2GL-G3
3	3	BOUSOUF	HALIMA	2GL-G1
4	12	BENALI	SALMA	2GL-G3
5	13	MOURAD	OUSSAMA	2GL-G2

	Code	Nom	Coef
1	M2.1	Reseaux Info	3
2	M2.2	Administration BD	3
3	M2.3	Communication	2

	Code	Code_Etud	Code_Mat	Date_Ex	Note
1	1	1	M2.1	2022-03-24 10:38:43.187	10.00
2	2	1	M2.2	2022-03-24 10:38:44.073	19.00
3	3	1	M2.3	2022-03-24 10:38:44.773	17.00
4	4	2	M2.1	2022-03-24 10:38:45.497	13.00
5	5	2	M2.2	2022-03-24 10:38:45.867	15.40
6	6	2	M2.3	2022-03-24 10:38:46.187	16.00
7	7	3	M2.1	2022-03-24 10:38:46.840	16.00
8	8	3	M2.2	2022-03-24 10:38:47.107	14.00
9	9	3	NULL	2022-03-24 10:38:47.383	18.00
10	11	12	M2.1	2022-03-25 17:14:26.470	15.00
11	14	1	M2.2	2022-03-24 17:15:16.143	16.00

10.

```
Use Evaluation

GO

Select count(*) from Etudiant;

Select count(*) from Matiere;

Select count(*) from Examen;
```

	(No column name)
1	5

	(No column name)
1	3

	(No column name)
1	11

11.

```
UPDATE Examen SET Code= Code+100;

DELETE FROM Matière Where Code='M2.1';
```

12.

```
SELECT dbo.Examen.Code, dbo.Etudiant.Code as Code_Etud , Code_Mat, Note
FROM dbo.Examen,dbo.Etudiant
WHERE dbo.Etudiant.Code = Code_Etud AND dbo.Etudiant.Code IN(1,2,3)
ORDER BY Code_Etud, Note desc
```

	Code	Code_Etud	Code_Mat	Note
1	2	1	M2.2	19.00
2	3	1	M2.3	17.00
3	14	1	M2.2	16.00
4	6	2	M2.3	16.00
5	5	2	M2.2	15.40
6	9	3	NULL	18.00
7	8	3	M2.2	14.00

13.

```
SELECT Etudiant.Code,count(Examen.Code) as 'Nombre exam', min(Note)
as 'Note Min', max(Note) as 'Note Max'
FROM Etudiant, Examen
Where Examen.Code_Etud = Etudiant.Code
GROUP BY Etudiant.Code
```

	Code	Nombre exam	Note Min	Note Max
1	1	3	16.00	19.00
2	2	2	15.40	16.00
3	3	2	14.00	18.00

14.

```
UPDATE Examen
SET Note = 14
WHERE Code_Etud = 2 and Code_Mat = 'M1.2'
```

15.

```
DELETE FROM Examen
WHERE Note between 0 and 8
```

16.

```
SELECT Code_Etud, (sum(Note*Coef)/Sum(Coef))
FROM Examen,Matiere
WHERE Examen.Code_Mat = Matiere.Code
GROUP BY Code_Etud
```

	Code_Etud	(No column name)
1	1	17.375000
2	2	15.640000
3	3	14.000000

17.

SELECT min(Note) as note_min, max(Note) as note_max FROM Examen

	note_min	note_max
1	14.00	19.00

18.

SELECT et.*,Note

FROM Examen ex, Etudiant et

WHERE Code_Etud= et.code and (note=(Select min(note) FROM Examen)

OR note=(Select max(note) FROM Examen))

	Code	Nom	Prenom	Classe	Note
1	1	ABIDI	AHMED	2GL-G1	19.00
2	3	BOUSOUF	HALIMA	2GL-G1	14.00

19.

SELECT mat.*,Note

FROM Examen ex, matiere mat

WHERE mat.code = ex.Code_Mat and (note =(Select min(note) FROM

Examen) OR note=(Select max(note) FROM Examen))

	Code	Nom	Coef	Note
1	M2.2	Administration BD	3	19.00
2	M2.2	Administration BD	3	14.00

20.

DELETE FROM Examen

WHERE note=(Select min(note) FROM Examen) OR note=(Select max(note)

FROM Examen)