

PROJET 3:

Créez et utilisez une base de données
immobilière avec SQL

Présentation des livrables

Livrables 1_4:

DICTIONNAIRE DE DONNEES

CODE	SIGNIFICATION	LONGUEUR	REGLE DE GESTION	TABLES
Local	Concatenation des champs : no_voie + type_voie + voie	50	VARCHAR NOT NULL	Table bien
Surface_carrez	Surface carréé du 1er lot		FLOAT	Table bien
Type_local	Type de local(maison,appartement,ect.)	50	VARCHAR NOT NULL	Table bien
Surface_Local	Surface totale du local	50	VARCHAR NOT NULL	Table bien
Total_Piece	Nombre de pièces principales		INTEGER	Table bien
Date	Date de signature de l'acte		DATE NOT NULL	Table vente
Valeur	Valeur foncière		INTEGER	Table vente
Code_Département	Code département		INTEGER NOT NULL	Table commune
Nom_commune	Nom de la commune	50	VARCHAR NOT NULL	Table commune
Nom_region	Nom de la région	50	VARCHAR NOT NULL	Table région
Nbre_habitant	Code région		INTEGER NOT NULL	Table popultaion

Livrables 2_4:Schéma relationnel modifié

Automatic Layout

Bien

Id_bien: INTEGER NOT NULL
Local: VARCHAR(50) NOT NULL
Surface_carrez: FLOAT
Type_local: VARCHAR(50) NOT NULL
Surface_local: VARCHAR(50)
Total_piece: INTEGER
Id_codedep_codecommune: VARCHAR NOT NULL

Vente

Id_vente: INTEGER NOT NULL
Date: DATE NOT NULL
Valeur: INTEGER
Id_bien: INTEGER NOT NULL

Population

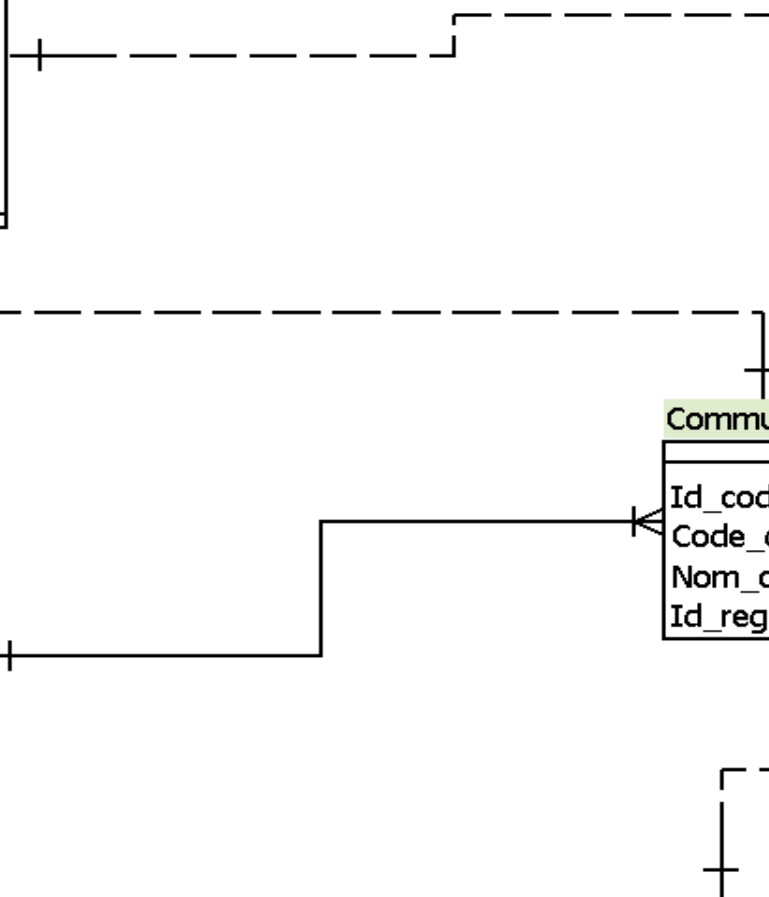
Id_codedep_codecommune: VARCHAR NOT NULL
Nbre_habitant: INTEGER NOT NULL

Commune

Id_codedep_codecommune: VARCHAR NOT NULL
Code_departement: INTEGER NOT NULL
Nom_commune: VARCHAR(50) NOT NULL
Id_region: INTEGER NOT NULL

Region

Id_region: INTEGER NOT NULL
Nom_region: VARCHAR(50) NOT NULL



- **Livrables 3_4:**

- Base de données opérationnelle avec les données du 1er semestre 2020 (captures d'écran directement du système de gestion de base de données des tables construites)



MySQL Workbench: Présentation

requetes6_221204_V3* ×

```

1  -- Requete 1: Nombres total d'appartements vendus au 1er semestre 2020
2
3  • SELECT
4  COUNT(DISTINCT BIEN.ID_BIEN) AS NB_APPAT
5  FROM VENTE
6  JOIN BIEN ON BIEN.ID_BIEN=VENTE.ID_BIEN
7  WHERE BIEN.TYPE_LOCAL='APPARTEMENT'
8  AND VENTE.DATE BETWEEN '2020-01-01' AND '2020-06-30';
9
10 -- Requete 2: Le nombre de ventes d'appartements par région pour le 1er semestre 2020
11
12 • SELECT
13 COMMUNE.ID_REGION,REGION.NOM_REGION,
14 COUNT(DISTINCT BIEN.ID_BIEN) AS NB_VENTE_APPART
15 FROM BIEN
16 INNER JOIN VENTE ON BIEN.ID_BIEN=VENTE.ID_BIEN
17 INNER JOIN COMMUNE ON BIEN.ID_CODEDEP_CODECOMMUNE=COMMUNE.ID_CODEDEP_CODECOMMUNE
18 INNER JOIN REGION ON COMMUNE.ID_REGION=REGION.ID_REGION
19 WHERE BIEN.TYPE_LOCAL='APPARTEMENT'
20 AND VENTE.DATE BETWEEN '2020-01-01' AND '2020-06-30'
21 GROUP BY COMMUNE.ID_REGION,REGION.NOM_REGION
22 ORDER BY NB_VENTE_APPART DESC;

```

- ▼ data_immo
 - ▼ Tables
 - bien
 - commune
 - population
 - region
 - vente
 - Views
 - Stored Procedures
 - Functions

Administration Schemas

Information :

Schema: data immo

SQLAdditions

◀ ▶ | I? ⚡ I? | Jump to

Automatic context help is disabled.
Use the toolbar to manually get
help for the current caret position
or to toggle automatic help.

Context Help Snippets

Output

 Action Output

#	Time	Action
---	------	--------

Message

Duration / Fetch

Table-> Bien

SCHEMAS

Filter objects

- data_immo
 - Tables
 - bien
 - Columns
 - Indexes
 - Foreign Keys
 - Id_codedep_codecommune
 - Triggers
 - commune
 - Columns
 - Indexes
 - Foreign Keys
 - Id_region
 - Triggers
 - population

Administration

Schemas

Information

Table: bien

Columns:

Id_Bien	int PK
Local	varchar(50)
Surface_carrez	float
Type_local	varchar(50)
Surface_local	varchar(50)
Total_piece	int
Id_codedep_codecommune	varchar(50)

Related Tables:

Target	commune (Id_codedep_codecommune → Id_codedep_codecommune)
On Update	RESTRICT
On Delete	RESTRICT

Object Info

Session



Table Name: bien

Schema: data_immo

Charset/Collation: utf8mb4

utf8mb4_0900_ai_ci

Engine: InnoDB

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
Id_Bien	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Local	VARCHAR(50)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Surface_carrez	FLOAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
Type_local	VARCHAR(50)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Surface_local	VARCHAR(50)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL

Column Name:

Data Type:

Charset/Collation:

Default:

Comments:

Storage:

☐ Virtual

☐ Stored

☐ Primary Key

☐ Not Null

☐ Unique

☐ Binary

☐ Unsigned

☐ Zero Fill

☐ Auto Increment

☐ Generated

Columns

Indexes

Foreign Keys

Triggers

Partitioning

Options

Apply

Revert

Context Help

Snippets

Output

Action Output

#

Time

Action

Message

Duration / Fetch

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

SCHEMAS

Filter objects

data_immo

Tables

bien

Columns

Indexes

Foreign Keys

Id_codedep_codecommune

Triggers

commune

Columns

Indexes

Foreign Keys

Id_region

Triggers

population

Administration

Schemas

Information

Table: bien

Columns:

Id_Bien

Local

Surface_carrez

Type_local

Surface_local

Total_piece

Id_codedep_codecommune

int PK

varchar(50)

float

varchar(50)

varchar(50)

int

varchar(50)

Related Tables:

Target

On Update

On Delete

commune

(Id_codedep_codecommune → Id_codedep_codecommune)

RESTRICT

RESTRICT

1 • `SELECT * FROM data_immo.bien;`

Result Grid

Filter Rows:

Edit:

Export/Import:

Wrap Cell Content:

Fetch rows:

	Id_Bien	Local	Surface_carrez	Type_local	Surface_local	Total_piece	Id_codedep_codecommune
▶	1	190RUECENTRALE	50.42	Appartement	52	2	0
	2	347RUE DU CHATEAU	48.22	Appartement	48	3	1
	3	58AVDU MONT BLANC	130.8	Appartement	130	6	2
	4	140RUE DE L'ABBE JOLIVET	109.22	Maison	109	5	3
	5	39RUE BUFFON	108.65	Appartement	91	4	4
	6	28AV JEAN FALCONNIER	31.65	Appartement	32	2	5
	7	8RUE DE GENEVE	52.58	Appartement	52	2	6

bien 1 x

Apply

Revert

Context Help

Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 1	14:58:08	SELECT * FROM data_immo.bien	34169 row(s) returned	0.000 sec / 0.032 sec

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Table->Commune

SCHEMAS

Filter objects

- data_immo
 - Tables
 - bien
 - Columns
 - Indexes
 - Foreign Keys
 - Id_codedep_codecommune
 - Triggers
 - commune
 - Columns
 - Indexes
 - Foreign Keys
 - Id_region
 - Triggers
 - population

Administration Schemas

Information

Table: **commune**

Columns:

<u>Id_codedep_codecommune</u>	varchar(50)
Code_departement	int
Nom_commune	varchar(50)
Id_region	int

Related Tables:

Target	region (Id_region → Id_region)
On Update	RESTRICT
On Delete	RESTRICT



Table Name: commune

Schema: data_immo

Charset/Collation: utf8mb4

utf8mb4_0900_ai_ci

Engine: InnoDB

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
Id_codedep_codecommune	VARCHAR(50)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Code_departement	INT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Nom_commune	VARCHAR(50)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Id_region	INT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Column Name:

Data Type:

Charset/Collation:

Default:

Comments:

Storage:

☐ Virtual

☐ Stored

☐ Primary Key

☐ Not Null

☐ Unique

☐ Binary

☐ Unsigned

☐ Zero Fill

☐ Auto Increment

☐ Generated

Columns Indexes Foreign Keys Triggers Partitioning Options

Apply

Revert

Context Help

Snippets

Output

Action Output

#

Time

Action

Message

Duration / Fetch

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.


```
1 ● SELECT * FROM data_immo.commune;
```

Administration Schemas

Table: commune

Columns:

<u>Id_codedep</u>	varchar(50)
<u>codecommune</u>	PK
Code_departement	int
Nom_commune	varchar(50)
Id_region	int

Related Tables:

Target	region (Id_region → Id_region)
On Update	RESTRICT
On Delete	RESTRICT

Object Info Session

Result Grid
Filter Rows:
Edit:
Export/Import:
Wrap Cell Content:
Fetch rows:

	Id_codedep_codecommune	Code_departement	Nom_commune	Id_region
►	0	1	SAINT-ETIENNE-DU-BOIS	84
	1	1	CHEVRY	84
	10	1	AMBERIEU-EN-BUGEY	84
	100	4	PIERRERUE	93
	1000	35	SAINT-ARMEL	53
	1001	35	SENS-DE-BRETAGNE	53
	1002	35	MONTREUIL-SUR-ILLE	53

commune 1 x

Apply

Revert

[Context Help](#)

Snippets

Output :

Action Output

#	Time	Action	Message	Duration / Fetch
1	14:58:08	SELECT * FROM data_immo.bien	34169 row(s) returned	0.000 sec / 0.032 sec
2	15:02:13	SELECT * FROM data_immo.commune	3167 row(s) returned	0.000 sec / 0.000 sec

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Table->Population

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator: requetes6_221204_V3* population - Table x

SCHEMAS

Filter objects

data_immo

- Tables
 - bien
 - commune
 - population
- Columns
 - Id_codedep_codecommune
 - Nbre_habitant
- Indexes
- Foreign Keys
- Triggers
- region
- vente
- Views
- Stored Procedures
- Functions

Administration Schemas

Information

Table: population

Columns:

- Id_codedep_codecommune** varchar(50) PK
- Nbre_habitant** int

Table Name: population Schema: data_immo

Charset/Collation: utf8mb4 utf8mb4_0900_ai_ci Engine: InnoDB

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
Id_codedep_codecommune	VARCHAR(50)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Nbre_habitant	INT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Column Name: Data Type: Charset/Collation: Default: Storage: ☐ Virtual ☐ Stored ☐ Primary Key ☐ Not Null ☐ Unique ☐ Binary ☐ Unsigned ☐ Zero Fill ☐ Auto Increment ☐ Generated

Comments:

Columns Indexes Foreign Keys Triggers Partitioning Options

Apply Revert

MySQL Workbench

Local instance MySQL80

FileEditViewQueryDatabaseServerToolsScriptingHelp

Navigator

SCHEMAS

Filter objects

data_immo

Tables

bien

commune

population

Columns

Id_codedep_codecommune

Nbre_habitant

Indexes

Foreign Keys

Triggers

region

vente

Views

Stored Procedures

Functions

AdministrationSchemas

Information

requetes6_221204_V3*populationpopulation

1

SELECT * FROM data_immo.population;

Result Grid

Filter Rows:

EditExport/ImportWrap Cell ContentFetch rows

	Id_codedep_codecommune	Nbre_habitant
▶	10002	242
	10003	3584
	10004	209
	10005	267
	10006	2884
	10007	106
	10008	114
	10009	89
	1001	798
	10010	49
	10011	211

population 1

ApplyRevertContext HelpSnippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 1	07:21:39	SELECT * FROM data_immo.population	34878 row(s) returned	0.000 sec / 0.016 sec

Object InfoSession

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Table->Région

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator: requetes6_221204_V3* region - Table x

SCHEMAS

Filter objects

- data_immo
 - Tables
 - bien
 - commune
 - population
 - region**
 - Columns
 - Indexes
 - Foreign Keys
 - Triggers
 - vente
 - Views
 - Stored Procedures
 - Functions

Table: region

Columns:

- Id_region int PK
- Nom_region varchar(50)

Table Name: region Schema: data_immo

Charset/Collation: utf8mb4 utf8mb4_0900_ai_ci Engine: InnoDB

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
Id_region	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Nom_region	VARCHAR(50)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Column Name: Data Type: Charset/Collation: Default: Storage: ☐ Virtual ☐ Stored ☐ Primary Key ☐ Not Null ☐ Unique ☐ Binary ☐ Unsigned ☐ Zero Fill ☐ Auto Increment ☐ Generated

Comments:

Columns Indexes Foreign Keys Triggers Partitioning Options

Apply Revert

MySQL Workbench

Local instance MySQL80

FileEditViewQueryDatabaseServerToolsScriptingHelp

SQLSQL

Navigator

SCHEMAS

Filter objects

data_immo

Tables

bien

commune

population

region

Columns

Indexes

Foreign Keys

Triggers

vente

Views

Stored Procedures

Functions

AdministrationSchemas

Information

Table: region

Columns:

Id_region

Nom_region

int PK

varchar(50)

requetes6_221204_V3*

region

Don't Limit

1

SELECT * FROM data_immo.region;

Result Grid

Filter Rows:

Edit:

Export/Import:

Wrap Cell Content:

	Id_region	Nom_region
1	Guadeloupe	
2	Martinique	
3	Guyane	
4	La R��union	
11	��le-de-France	
24	Centre-Val de Loire	
27	Bourgogne-Franche-Comt��	
28	Normandie	
32	Hauts-de-France	
44	Grand Est	
52	Pays de la Loire	

region 1

ApplyRevert

Context HelpSnippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	07:28:09	SELECT * FROM data_immo.region	17 row(s) returned	0.000 sec / 0.000 sec

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Table->Vente

SCHEMAS

Filter objects

Triggers

region

Columns

Indexes

Foreign Keys

Triggers

vente

Columns

Indexes

Foreign Keys

Id_bien

Triggers

Views

Stored Procedures

Functions

Administration

Schemas

Information

Table: **vente**

Columns:
Id_vente int PK
Date date
Valeur int
Id_bien int

Related Tables:
Target bien (Id_bien → Id_Bien)
On Update RESTRICT
On Delete RESTRICT

Table Name: vente

Schema: data_immo

Charset/Collation: utf8mb4 utf8mb4_0900_ai_ci

Engine: InnoDB

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
Id_vente	INT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Date	DATE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Valeur	INT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
Id_bien	INT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Column Name:

Charset/Collation:

Comments:

Data Type:

Default:

Storage:
☐ Virtual
☐ Stored
☐ Primary Key
☐ Binary
☐ Auto Increment
☐ Not Null
☐ Unsigned
☐ Generated
☐ Unique
☐ Zero Fill

ColumnsIndexesForeign KeysTriggersPartitioningOptions

ApplyRevert

Output

Action Output

#	Time	Action	Message	Duration / Fetch
---	------	--------	---------	------------------

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Context HelpSnippets

Object InfoSession

SCHEMAS

Filter objects

Triggers

region

Columns

Indexes

Foreign Keys

Triggers

vente

Columns

Indexes

Foreign Keys

Id_bien

Triggers

Views

Stored Procedures

Functions

Administration

Schemas

Information

Table: **commune**

Columns:

Id_codedep

codecommune

varchar(50)

PK

Code_departement

int

Nom_commune

varchar(50)

Id_region

int

Related Tables:

Target

region (Id_region → Id_region)

On Update

RESTRICT

On Delete

RESTRICT

Object Info

Session

1 • SELECT * FROM data_immo.vente;

Result Grid

Filter Rows:

Edit:

Export/Import:

Wrap Cell Content:

Fetch rows:

	Id_vente	Date	Valeur	Id_bien
▶	1	2020-02-03	56000	1
	2	2020-01-02	165000	2
	3	2020-01-08	720000	3
	4	2020-01-06	429250	4
	5	2020-01-07	220900	5
	6	2020-01-21	42000	6
	7	2020-01-07	262000	7

vente 2

Apply

Revert

Context Help

Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 1	15:05:01	SELECT * FROM data_immo.vente	34151 row(s) returned	0.000 sec / 0.000 sec

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Livrables 4_4:Requêtes et résultats

Requête 1:

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator: requetes6_221204_V3* SQL File 3* x

SCHEMAS

Filter objects

data_immo

- Tables
 - bien
 - commune
 - population
 - region
 - vente
- Views
- Stored Procedures
- Functions

Administration Schemas

Information

Schema: data_immo

1 -- Requete 1: Nombres total d'appartements vendus au 1er semestre 2020

2

3 • SELECT

4 COUNT(DISTINCT BIEN.ID_BIEN) AS NB_APPAT

5 FROM VENTE

6 JOIN BIEN ON BIEN.ID_BIEN=VENTE.ID_BIEN

7 WHERE BIEN.TYPE_LOCAL='APPARTEMENT'

8 AND VENTE.DATE BETWEEN '2020-01-01' AND '2020-06-30';

Result Grid

	NB_APPAT
▶	31362

Result 2 x

Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 1	07:57:40	SELECT COUNT(DISTINCT BIEN.ID_BIEN) AS NB_APPAT FROM VENTE JOIN BIEN ON BIEN.ID_BIEN=...	1 row(s) returned	0.094 sec / 0.000 sec

Object Info Session

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Requête 2:

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator: requetes6_221204_V3* SQL File 4* x

SCHEMAS

Filter objects

data_immo

- Tables
 - bien
 - commune
 - population
 - region
 - vente
- Views
- Stored Procedures
- Functions

Administration Schemas

Information

Schema: data_immo

```
-- Requete 2: Le nombre de ventes d'appartements par région pour le 1er semestre 2020

SELECT
  COMMUNE.ID_REGION, REGION.NOM_REGION,
  COUNT(DISTINCT BIEN.ID_BIEN) AS NB_VENTE_APPART
FROM BIEN
INNER JOIN VENTE ON BIEN.ID_BIEN=VENTE.ID_BIEN
INNER JOIN COMMUNE ON BIEN.ID_CODEDEP_CODECOMMUNE=COMMUNE.ID_CODEDEP_CODECOMMUNE
INNER JOIN REGION ON COMMUNE.ID_REGION=REGION.ID_REGION
WHERE BIEN.TYPE_LOCAL='APPARTEMENT'
AND VENTE.DATE BETWEEN '2020-01-01' AND '2020-06-30'
GROUP BY COMMUNE.ID_REGION, REGION.NOM_REGION
ORDER BY NB_VENTE_APPART DESC;
```

Result Grid

	ID_REGION	NOM_REGION	NB_VENTE_APPART
▶	11	Île-de-France	13989
	93	Provence-Alpes-Côte d'Azur	3645
	84	Auvergne-Rhône-Alpes	3253
	75	Nouvelle-Aquitaine	1931
	76	Occitanie	1640
	52	Pays de la Loire	1357
	32	Hauts-de-France	1252
	44	Grand Est	984
	53	Bretagne	983
	28	Normandie	861

Result 1 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 1	08:01:09	SELECT COMMUNE.ID_REGION, REGION.NOM_REGION, COUNT(DISTINCT BIEN.ID_BIEN) AS NB_VE...	16 row(s) returned	22.969 sec / 0.000 sec

Object Info Session

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Requête 3:

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

data_immo

- Tables
 - bien
 - commune
 - population
 - region
 - vente
- Views
- Stored Procedures
- Functions

Administration Schemas Information

Schema: data_immo

requetes6_221204_V3* SQL File 5*

Don't Limit

```
1 -- Requete 3: Proportion des ventes d'appartements par le nombre de pièces
2
3 • SELECT TOTAL_PIECE,COUNT(VENTE.ID_VENTE) AS NB_VENTES_PAR_NOMBRE_PIECES,
4 ROUND((COUNT(VENTE.ID_VENTE)*100)/
5 -- Requete 1
6 ( SELECT
7 COUNT(DISTINCT BIEN.ID_BIEN) AS NB_APPAT
8 FROM VENTE
9 JOIN BIEN ON BIEN.ID_BIEN=VENTE.ID_BIEN
10 WHERE BIEN.TYPE_LOCAL='APPARTEMENT'
11 AND VENTE.DATE BETWEEN '2020-01-01' AND '2020-06-30'),2) AS PROPORTION_DES_VENTES
12 FROM VENTE
13 NATURAL JOIN BIEN
14 WHERE BIEN.TYPE_LOCAL='APPARTEMENT'
15 GROUP BY TOTAL_PIECE
16 ORDER BY TOTAL_PIECE DESC;
```

Result Grid

	TOTAL_PIECE	NB_VENTES_PAR_NOMBRE_PIECES	PROPORTION_DES_VENTES
11	1	1	0.00
10	2	2	0.01
9	8	8	0.03
8	17	17	0.05
7	54	54	0.17
6	203	203	0.65
5	1114	1114	3.55
4	4458	4458	14.21

Result 1 x

Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 1	08:06:32	SELECT TOTAL_PIECE,COUNT(VENTE.ID_VENTE) AS NB_VENTES_PAR_NOMBRE_PIECES, ROUND((...	12 row(s) returned	0.156 sec / 0.000 sec

Object Info Session

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Requête 4:

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator: requetes6_221204_V3* SQL File 6* x

SCHEMAS

Filter objects

data_immo

- Tables
 - bien
 - commune
 - population
 - region
 - vente
- Views
- Stored Procedures
- Functions

Administration Schemas

Information

Schema: data_immo

Result Grid

	CODE_DEPARTEMENT	PRIX
▶	75	12052.89
	92	7219.39
	94	5343.28
	6	4700.33
	74	4667.13
	93	4344.78
	78	4225.25
	69	4059.31
	33	3764.14
	5	3754.92

Result 4 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 1	08:55:51	SELECT DISTINCT CODE_DEPARTEMENT,ROUND(AVG((VALEUR/SURFACE_CARREZ)),2) AS PRIX FR...	10 row(s) returned	20.032 sec / 0.000 sec

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Requête 5:

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

Open a SQL script file in a new query tab

Filter objects

data_immo

- Tables
 - bien
 - commune
 - population
 - region
 - vente
- Views
- Stored Procedures
- Functions

Administration Schemas

Information

Schema: data_immo

requetes6_221204_V3* SQL File 7*

Don't Limit

```
1 -- Requete 5: Prix moyen du mètre carré d'une maison en ile -de-France
2
3 • SELECT ROUND(AVG((VALEUR/SURFACE_CARREZ)),2) AS PRIX_MOYEN_M2
4 FROM BIEN
5 JOIN VENTE ON VENTE.ID_BIEN=BIEN.ID_BIEN
6 JOIN COMMUNE ON BIEN.ID_CODEDEP_CODECOMMUNE=COMMUNE.ID_CODEDEP_CODECOMMUNE
7 JOIN REGION ON COMMUNE.ID_REGION=REGION.ID_REGION
8 WHERE TYPE_LOCAL='MAISON'
9 AND COMMUNE.CODE_DEPARTEMENT IN('75','77','78','91','92','93','94','95');
```

Result Grid

	PRIX_MOYEN_M2
▶	3745.01

Result 1

Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 1	09:04:39	SELECT ROUND(AVG((VALEUR/SURFACE_CARREZ)),2) AS PRIX_MOYEN_M2 FROM BIEN JOIN VENTE...	1 row(s) returned	26.547 sec / 0.000 sec

Object Info Session

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Requête 6:

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator: SCHEMAS

Filter objects

data_immo

- Tables
 - bien
 - commune
 - population
 - region
 - vente
- Views
- Stored Procedures
- Functions

Administration Schemas

Information

Schema: data_immo

requetes6_221204_V3* SQL File 8*

Don't Limit

```
-- Requete 6: Liste des 10 appartements les plus cher avec la région et le nombre de mètre carrés

SELECT BIEN.ID_BIEN,VALEUR,COMMUNE.CODE_DEPARTEMENT,SURFACE_CARREZ,REGION.NOM_REGION
FROM VENTE
JOIN BIEN ON VENTE.ID_BIEN=BIEN.ID_BIEN
JOIN COMMUNE ON BIEN.ID_CODEDEP_CODECOMMUNE=COMMUNE.ID_CODEDEP_CODECOMMUNE
JOIN REGION ON COMMUNE.ID_REGION=REGION.ID_REGION
WHERE TYPE_LOCAL='APPARTEMENT'
ORDER BY ROUND( VENTE.VALEUR,0) DESC
LIMIT 10;
```

Result Grid

	ID_BIEN	VALEUR	CODE_DEPARTEMENT	SURFACE_CARREZ	NOM_REGION
▶	32275	9000000	75	9.1	Île-de-France
	21835	8600000	91	64	Île-de-France
	29799	8577713	75	20.55	Île-de-France
	32433	7620000	75	42.77	Île-de-France
	29850	7600000	75	253.3	Île-de-France
	29522	7535000	75	139.9	Île-de-France
	31973	7420000	75	360.95	Île-de-France
	32135	7200000	75	595	Île-de-France
	29353	7050000	75	122.56	Île-de-France
	29513	6600000	75	79.38	Île-de-France

Result 1 x

Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 1	09:11:21	SELECT BIEN.ID_BIEN,VALEUR,COMMUNE.CODE_DEPARTEMENT,SURFACE_CARREZ,REGION.NOM...	10 row(s) returned	0.140 sec / 0.000 sec

Object Info Session

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Requête 7:

SQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help



requetes6_221204_V3*

SQL File 9*

AS

objects

data_immo

Tables

bien

commune

population

region

vente

Views

Stored Procedures

Functions

Administration Schemas

Schema: data_immo

1 -- Requete 7: Taux d'evolution du nombre de ventes entre le premier et le second trimestre 2020

2

3 • WITH

4 VENTES_TRIM1 AS

5 (SELECT COUNT(VENTE.ID_VENTE) AS NB_V1

6 FROM VENTE

7 WHERE VENTE.DATE BETWEEN '2020-01-01' and '2020-03-31'),

8 VENTES_TRIM2 AS

9 (SELECT COUNT(VENTE.ID_VENTE) AS NB_V2

10 FROM VENTE

11 WHERE VENTE.DATE BETWEEN '2020-04-01' AND '2020-06-30')

12 SELECT NB_V1,NB_V2,ROUND((NB_V2-NB_V1)*100.0/(NB_V1),2) AS TAUX_EVOLUTION

13 FROM VENTES_TRIM1,VENTES_TRIM2;

< >

Result Grid Filter Rows: Export: Wrap Cell Content: IA

	NB_V1	NB_V2	TAUX_EVOLUTION
▶	16769	17382	3.66

Result 1 x

Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 1	09:13:37	WITH VENTES_TRIM1 AS (SELECT COUNT(VENTE.ID_VENTE) AS NB_V1 FROM VENTE WHERE VEN...	1 row(s) returned	0.047 sec / 0.000 sec

SQLAdditions

Jump to

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Requête 8:

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

data_immo

Tables

- bien
- commune
- population
- region
- vente

Views

Stored Procedures

Functions

Administration Schemas

Information

Schema: data_immo

requetes6_221204_V3* SQL File 10* x

Don't Limit

```
1 -- Requete 8:Le classement des régions par rapport au prix au Mètre carré des appartements de plus de 4 pièces
2
3 • SELECT
4 REGION.ID_REGION,REGION.NOM_REGION ,ROUND(AVG(VALEUR/SURFACE_CARREZ),0) AS PRIX_M2
5 FROM VENTE
6 INNER JOIN BIEN ON VENTE.ID_BIEN=BIEN.ID_BIEN
7 INNER JOIN COMMUNE ON BIEN.ID_CODEDEP_CODECOMMUNE=COMMUNE.ID_CODEDEP_CODECOMMUNE
8 INNER JOIN REGION ON COMMUNE.ID_REGION=REGION.ID_REGION
9 WHERE BIEN.TYPE_LOCAL='APPARTEMENT'
10 AND TOTAL_PIECE>4
11 GROUP BY REGION.ID_REGION
12 ORDER BY PRIX_M2 DESC;
```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	ID_REGION	NOM_REGION	PRIX_M2
▶	11	Île-de-France	8770
	4	La Réunion	3642
	93	Provence-Alpes-Côte d'Azur	3588
	84	Auvergne-Rhône-Alpes	2891
	75	Nouvelle-Aquitaine	2465
	53	Bretagne	2412
	52	Pays de la Loire	2316
	32	Hauts-de-France	2190
	76	Occitanie	2097
	28	Normandie	2016
	44	Grand Est	1541

Result 1 x

Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 2	09:18:30	SELECT REGION.ID_REGION,REGION.NOM_REGION ,ROUND(AVG(VALEUR/SURFACE_CARREZ),0) A...	14 row(s) returned	21.718 sec / 0.000 sec

Requête 9:

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator: requetes6_221204_V3* SQL File 11* x

SCHEMAS

Filter objects

data_immo

- Tables
 - bien
 - commune
 - population
 - region
 - vente
- Views
- Stored Procedures
- Functions

Administration Schemas Information

Schema: data_immo

SQL Editor

```
-- Requete 9: Liste des communes ayant eu au moins 50 ventes au 1er trimestre

WITH
NB_VENTE_TRIM1 AS(SELECT COMMUNE.NOM_COMMUNE,VENTE.DATE,VENTE.ID_VENTE
FROM VENTE
INNER JOIN BIEN ON VENTE.ID_BIEN=BIEN.ID_BIEN
INNER JOIN COMMUNE ON BIEN.ID_CODEDEP_CODECOMMUNE=COMMUNE.ID_CODEDEP_CODECOMMUNE
WHERE VENTE.DATE BETWEEN '2020-01-01' and '2020-03-31'),
NB_VENTE AS(SELECT NOM_COMMUNE,COUNT(ID_VENTE) AS NBVENTE
FROM NB_VENTE_TRIM1
GROUP BY NOM_COMMUNE)
SELECT*
FROM NB_VENTE
WHERE NBVENTE>50
ORDER BY NBVENTE DESC;
```

Result Grid

	NOM_COMMUNE	NBVENTE
PARIS 17	PARIS 17	228
PARIS 15	PARIS 15	215
PARIS 18	PARIS 18	209
NICE	NICE	173
PARIS 11	PARIS 11	169
PARIS 16	PARIS 16	165
BORDEAUX	BORDEAUX	157
PARIS 14	PARIS 14	146
PARIS 20	PARIS 20	127
NANTES	NANTES	119

Result 1 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	09:37:53	WITH NB_VENTE_TRIM1 AS(SELECT COMMUNE.NOM_COMMUNE,VENTE.DATE,VENTE.ID_VENTE F...	46 row(s) returned	10.313 sec / 0.000 sec

Object Info Session

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Requête 10:

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator: requetes6_221204_V3* SQL File 12* x

SCHEMAS

Filter objects

data_immo

- Tables
 - bien
 - commune
 - population
 - region
 - vente
- Views
- Stored Procedures
- Functions

Administration Schemas Information

Schema: data_immo

SQL Editor

```
-- Requete 10: Différence en pourcentage du prix au mètre carré entre un appartement de 2 pièces et un appartement de 3 pièces

WITH
PRIX2PIECES AS
(SELECT ROUND(AVG(VALEUR/SURFACE_CARREZ),2) AS PRIX2
FROM VENTE
INNER JOIN BIEN ON VENTE.ID_BIEN=BIEN.ID_BIEN
WHERE BIEN.TYPE_LOCAL='APPARTEMENT'
AND TOTAL_PIECE = 2
AND VALEUR IS NOT NULL),
PRIX3PIECES AS
(SELECT ROUND(AVG(VALEUR/SURFACE_CARREZ),2) AS PRIX3
FROM VENTE
INNER JOIN BIEN ON VENTE.ID_BIEN=BIEN.ID_BIEN
WHERE BIEN.TYPE_LOCAL='APPARTEMENT'
AND TOTAL_PIECE = 3
AND VALEUR IS NOT NULL)
SELECT PRIX2,PRIX3,ROUND(((PRIX3-PRIX2)*100.0/(PRIX2)),2) AS DIFF_PRIX_M2
FROM PRIX2PIECES,PRIX3PIECES
GROUP BY PRIX2,PRIX3;
```

Result Grid

	PRIX2	PRIX3	DIFF_PRIX_M2
▶	4908.58	4299.9	-12.4

Result 1 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 1	09:41:07	WITH PRIX2PIECES AS (SELECT ROUND(AVG(VALEUR/SURFACE_CARREZ),2) AS PRIX2 FROM VENT...	1 row(s) returned	0.093 sec / 0.000 sec

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Object Info Session

Requête 11:

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHMAS

Filter objects

data_immo

Tables

- bien
- commune
- population
- region
- vente

Views

Stored Procedures

Functions

Administration Schemas

Information

Schema: data_immo

requetes6_221204_V3* SQL File 13* x

Don't Limit

```
1 -- Requete 11:Les moyennes de valeurs foncières pour le top 3 des communes des départements 6,13,33,59,69
2
3 WITH TABLE_TEMP AS
4 (SELECT (RANK()OVER(PARTITION BY (CODE_DEPARTEMENT)
5 ORDER BY AVG(VENTE.VALEUR)DESC)) AS RANG,
6 COMMUNE.NOM_COMMUNE,
7 COMMUNE.CODE_DEPARTEMENT,
8 VENTE.VALEUR,
9 ROUND(AVG(VENTE.VALEUR)) AS MOYENNE_VF
10 FROM VENTE
11 INNER JOIN BIEN ON VENTE.ID_BIEN=BIEN.ID_BIEN
12 INNER JOIN COMMUNE ON BIEN.ID_CODEDEP_CODECOMMUNE=COMMUNE.ID_CODEDEP_CODECOMMUNE
13 WHERE CODE_DEPARTEMENT IN(6,13,33,59,69)
14 AND VALEUR IS NOT NULL
15 GROUP BY COMMUNE.NOM_COMMUNE,COMMUNE.CODE_DEPARTEMENT)
16 SELECT RANG,NOM_COMMUNE,CODE_DEPARTEMENT,VALEUR
17 FROM TABLE_TEMP
18 WHERE RANG<=3;
```

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid

	RANG	NOM_COMMUNE	CODE_DEPARTEMENT	VALEUR
1	1	SAINT-JEAN-CAP-FERRAT	6	1380000
2	2	EZE	6	980000
3	3	MOUANS-SARTOUX	6	537700
1	1	GIGNAC-LA-NERTHE	13	330000
2	2	SAINT SAVOURNIN	13	330850
3	3	CASSIS	13	237000
1	1	LEGE-CAP-FERRET	33	800000
2	2	MAVRES	33	225000

Result 1 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
2	09:44:24	WITH TABLE_TEMP AS (SELECT (RANK()OVER(PARTITION BY (CODE_DEPARTEMENT)	ORD... 15 row(s) returned	3.031 sec / 0.000 sec

Object Info Session