

# Livrables 4\_4:Requêtes et résultats

## Requête 1:

The screenshot displays the MySQL Workbench interface. On the left, the 'SCHEMAS' pane shows the 'data\_immo' database selected. The main editor window contains a SQL query labeled 'Requete 1: Nombres total d'appartements vendus au 1er semestre 2020'. The query is as follows:

```
-- Requete 1: Nombres total d'appartements vendus au 1er semestre 2020
SELECT
COUNT(DISTINCT BIEN.ID_BIEN) AS NB_APPAT
FROM VENTE
JOIN BIEN ON BIEN.ID_BIEN=VENTE.ID_BIEN
WHERE BIEN.TYPE_LOCAL='APPARTEMENT'
AND VENTE.DATE BETWEEN '2020-01-01' AND '2020-06-30';
```

Below the query editor, the 'Result Grid' shows the results of the query:

NB_APPAT
31362

At the bottom, the 'Output' pane shows the 'Action Output' for the query execution:

#	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

## Requête 2:

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

SQL File 4\* x

Don't Limit

```
1 -- Requete 2: Le nombre de ventes d'appartements par région pour le 1er semestre 2020
2
3 SELECT
4     COMMUNE.ID_REGION, REGION.NOM_REGION,
5     COUNT(DISTINCT BIEN.ID_BIEN) AS NB_VENTE_APPART
6 FROM BIEN
7 INNER JOIN VENTE ON BIEN.ID_BIEN=VENTE.ID_BIEN
8 INNER JOIN COMMUNE ON BIEN.ID_CODEDEP_CODECOMMUNE=COMMUNE.ID_CODEDEP_CODECOMMUNE
9 INNER JOIN REGION ON COMMUNE.ID_REGION=REGION.ID_REGION
10 WHERE BIEN.TYPE_LOCAL='APPARTEMENT'
11 AND VENTE.DATE BETWEEN '2020-01-01' AND '2020-06-30'
12 GROUP BY COMMUNE.ID_REGION, REGION.NOM_REGION
13 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

SQLAdditions

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

Read Only Context Help Snippets

Object Info Session

## 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\* x

Don't Limit

```
-- Requete 3: Proportion des ventes d'appartements par le nombre de pièces
1
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		0.00
10	2		0.01
9	8		0.03
8	17		0.05
7	54		0.17
6	203		0.65
5	1114		3.55
4	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

SQLAdditions

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

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 6\*

Don't Limit

```
1 -- Requete 4: Liste des 10 départements où le prix du mètre carré est le plus élevé
2
3 SELECT DISTINCT CODE_DEPARTEMENT, ROUND(AVG((VALEUR/SURFACE_CARREZ)),2) AS PRIX
4 FROM VENTE
5 JOIN BIEN ON VENTE.ID_BIEN=BIEN.ID_BIEN
6 JOIN COMMUNE ON BIEN.ID_CODEDEP_CODECOMMUNE=COMMUNE.ID_CODEDEP_CODECOMMUNE
7 WHERE SURFACE_CARREZ <> 0
8 GROUP BY CODE_DEPARTEMENT
9 ORDER BY PRIX DESC
10 LIMIT 10;
```

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

Read Only Context Help Snippets

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

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 5:

MySQL Workbench

Local instance MySQL80 x

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');
```

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

Result Grid

	PRIX_MOYEN_M2
▶	3745.01

Result 1 x

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 VENT...	1 row(s) returned	26.547 sec / 0.000 sec

Object Info Session



## Requête 6:

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator: requetes6\_221204\_V3\* SQL: File 8\*

**SCHEMAS**

Filter objects

**data\_immo**

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

Administration Schemas Information

Schema: data\_immo

```
-- 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** | Filter Rows: | Export: | Wrap Cell Content: |

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:

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

requetes6\_221204\_V3\* SQL File 9\* x

Don't Limit

```
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;
```

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

Result Grid

	NB_V1	NB_V2	TAUX_EVOLUTION
▶	16769	17382	3.66

Result 1 x

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

## Requête 8:

MySQL Workbench

Local instance MySQL80

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\*

Don't Limit

```
-- Requete 8:Le classement des régions par rapport au prix au Mètre carré des appartements de plus de 4 pièces

1
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

	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

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 9:

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 11\* x

Don't Limit

```
-- Requete 9: Liste des communes ayant eu au moins 50 ventes au 1er trimestre
1
2
3 WITH
4 NB_VENTE_TRIM1 AS(SELECT COMMUNE.NOM_COMMUNE,VENTE.DATE,VENTE.ID_VENTE
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 WHERE VENTE.DATE BETWEEN '2020-01-01' and '2020-03-31'),
9 NB_VENTE AS(SELECT NOM_COMMUNE,COUNT(ID_VENTE) AS NBVENTE
10 FROM NB_VENTE_TRIM1
11 GROUP BY NOM_COMMUNE)
12 SELECT*
13 FROM NB_VENTE
14 WHERE NBVENTE>50
15 ORDER BY NBVENTE DESC;
```

Result Grid

	NOM_COMMUNE	NBVENTE
▶	PARIS 17	228
	PARIS 15	215
	PARIS 18	209
	NICE	173
	PARIS 11	169
	PARIS 16	165
	BORDEAUX	157
	PARIS 14	146
	PARIS 20	127
	NANTES	119
	PARIS 19	116

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

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 12\*

Don't Limit

```
1 -- Requete 10: Différence en pourcentage du prix au mètre carré entre un appartement de 2 pièces et un appartement de 3 pièces
2
3 WITH
4   PRX2PIECES AS
5   (SELECT ROUND(AVG(VALEUR/SURFACE_CARREZ),2) AS PRX2
6    FROM VENTE
7    INNER JOIN BIEN ON VENTE.ID_BIEN=BIEN.ID_BIEN
8    WHERE BIEN.TYPE_LOCAL='APPARTEMENT'
9    AND TOTAL_PIECE = 2
10   AND VALEUR IS NOT NULL),
11   PRX3PIECES AS
12   (SELECT ROUND(AVG(VALEUR/SURFACE_CARREZ),2) AS PRX3
13    FROM VENTE
14    INNER JOIN BIEN ON VENTE.ID_BIEN=BIEN.ID_BIEN
15    WHERE BIEN.TYPE_LOCAL='APPARTEMENT'
16    AND TOTAL_PIECE = 3
17   AND VALEUR IS NOT NULL)
18   SELECT PRX2,PRX3,ROUND(((PRX3-PRX2)*100.0/(PRX2)),2) AS DIFF_PRIX_M2
19   FROM PRX2PIECES,PRX3PIECES
20   GROUP BY PRX2,PRX3;
```

Result Grid

PRX2	PRX3	DIFF_PRIX_M2
4908.58	4299.9	-12.4

Result 1 x

Read Only Context Help Shippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	09:41:07	WITH PRX2PIECES AS (SELECT ROUND(AVG(VALEUR/SURFACE_CARREZ),2) AS PRX2 FROM VENT...	1 row(s) returned	0.093 sec / 0.000 sec

## Requête 11:

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 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;
```

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

SQLAdditions

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