

Document avec les requêtes et les résultats

1. Nombre total d'appartements vendus au 1er semestre 2020.

The screenshot shows the MySQL Workbench interface. The 'Schemas' panel on the left shows the 'Data Immo' database. The 'Query' tab is active, displaying the following SQL query:

```
1 SELECT COUNT(type_local) AS nombre_appt_vendu
2 FROM bien, vente
3 WHERE type_local LIKE 'Appartement'
4 AND bien.idbien = vente.id_bien
5 AND vente.date_mutation BETWEEN '2020-01-01' AND '2020-06-30';
```

The 'Result Grid' shows the results of the query:

nombre_appt_vendu
30897

The 'Action Output' panel shows the execution details:

Time	Action	Response	Duration / Fetch Time
16:29:05	WITH cte1 AS (SELECT ROUND(val_fonciere) AS prix_appt, surf_carrez AS nombre_...	10 row(s) returned	0.280 sec / 0.00090...

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2. Proportion des ventes d'appartements par le nombre de pièces.

The screenshot shows the MySQL Workbench interface. The 'Schemas' panel on the left shows the 'Data Immo' database. The 'Query' tab is active, displaying the following SQL query:

```
1 SELECT COUNT(type_local)*100/
2 (SELECT COUNT(type_local) FROM bien,vente
3 WHERE type_local = 'Appartement'
4 AND vente.id_bien = bien.idbien
5 AND vente.date_mutation BETWEEN '2020-01-01' AND '2020-06-30') AS proportion_de_vente, no_pieces,
6 COUNT(type_local) AS no_de_appart_vendu
7 FROM bien
8 WHERE type_local = 'Appartement'
9 GROUP BY no_pieces
10 ORDER BY no_pieces;
```

The 'Result Grid' shows the results of the query:

proportion_de_vente...	no_pieces	no_de_appart_vendu...
0.0971	0	30
21.6979	1	6704
31.4173	2	9707
28.7795	3	8692
14.3283	4	4427
3.5926	5	1110
0.6570	6	203
0.1748	7	54
0.0550	8	17
0.0259	9	8
0.0065	10	2
0.0032	11	1

The 'Action Output' panel shows the execution details:

Time	Action	Response	Duration / Fetch Time
16:29:05	WITH cte1 AS (SELECT ROUND(val_fonciere) AS prix_appt, surf_carrez AS nombre_...	10 row(s) returned	0.280 sec / 0.00090...

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3. Liste des 10 départements où le prix du mètre carré est le plus élevé.

The screenshot shows the MySQL Workbench interface with the following components:

- Top Bar:** MySQL Workbench, File, Edit, View, Query, Database, Server, Tools, Scripting, Help. Tue 16 Aug 00:22.
- Left Panel (SCHEMAS):** Filter objects, Data Immo (Tables: bien, commune, vente; Views; Stored Proce...; Functions; sys).
- Query Editor:**

```
1 WITH cte1 AS
2 (SELECT ROUND(SUM(val_fonciere)/SUM(surf_carrez)) AS prix_m2, code_dept AS departement
3 FROM bien, vente, commune
4 WHERE bien.id_commune = commune.id_commune
5 AND vente.id_bien = bien.id_bien
6 GROUP BY 2 ORDER BY prix_m2 DESC LIMIT 10)
7 SELECT * FROM cte1;
```
- Result Grid:** Shows the top 10 departments. The first row is highlighted.

prix_m2	departeme...
12017	75
7297	92
4977	94
4433	6
4219	74
4216	93
4076	78
3920	69
3680	73
3636	83
- Action Output:**

Time	Action	Response	Duration / Fetch Time
16:29:05	WITH cte1 AS (SELECT ROUND(val_fonciere) AS prix_appt, surf_carrez AS nombre...	10 row(s) returned	0.280 sec / 0.00090...
- Right Panel:** Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

4. Prix moyen du mètre carré d'une maison en Île-de-France.

The screenshot shows the MySQL Workbench interface with the following components:

- Top Bar:** MySQL Workbench, File, Edit, View, Query, Database, Server, Tools, Scripting, Help. Tue 16 Aug 00:23.
- Left Panel (SCHEMAS):** Filter objects, Data Immo (Tables: bien, commune, vente; Views; Stored Proce...; Functions; sys).
- Query Editor:**

```
1 WITH cte1 AS
2 (SELECT (ROUND(SUM(val_fonciere)/SUM(surf_carrez),2)) AS prix_moyen_m2, code_dept AS departement, type_local
3 FROM bien, vente, commune
4 WHERE vente.idvente = bien.idbien
5 AND bien.id_commune = commune.id_commune
6 AND type_local LIKE 'Maison'
7 AND code_dept IN (75,77,78,91,92,93,94,95)
8 GROUP BY code_dept, type_local
9 ORDER BY code_dept ASC)
10 SELECT ROUND((SUM(prix_moyen_m2)/8),2) AS prix_moyen_m2_maison_ile_france FROM cte1
11
12
```
- Result Grid:** Shows the average price per square meter for houses in Île-de-France. The first row is highlighted.

prix_moyen_m2_maison_ile_fra...
5230.77
- Action Output:**

Time	Action	Response	Duration / Fetch Time
16:29:05	WITH cte1 AS (SELECT ROUND(val_fonciere) AS prix_appt, surf_carrez AS nombre...	10 row(s) returned	0.280 sec / 0.00090...
- Right Panel:** Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

5. Liste des 10 appartements les plus chers avec le département et le nombre de mètres carrés.

The screenshot shows the MySQL Workbench interface with the following query in the SQL editor:

```
1 WITH cte1 AS
2 (SELECT ROUND(val_fonciere) AS prix_appt, surf_carrez AS nombre_m2, code_dept AS departement, type_local
3 FROM bien,vente,commune
4 WHERE vente.idvente = bien.idbien
5 AND bien.id_commune = commune.idcommune
6 AND type_local = 'Appartement'
7 ORDER BY prix_appt DESC
8 LIMIT 10)
9 SELECT * FROM cte1;
```

The Result Grid displays the following data:

idvente	idbien	idcommune	departement	nombre_m2	type_local	prix_appt
9000000	9.10	75	Appartement			
8600000	64.00	91	Appartement			
8577713	20.55	75	Appartement			
7620000	42.77	75	Appartement			
7600000	253.30	75	Appartement			
7535000	139.90	75	Appartement			
7420000	360.95	75	Appartement			
7200000	595.00	75	Appartement			
7050000	122.56	75	Appartement			
6600000	79.38	75	Appartement			

The Action Output shows the query execution details:

Time	Action	Response	Duration / Fetch Time
16:29:05	WITH cte1 AS (SELECT ROUND(val_fonciere) AS prix_appt, surf_carrez AS nombre_m2, code_dept AS departement, type_local FROM bien,vente,commune WHERE vente.idvente = bien.idbien AND bien.id_commune = commune.idcommune AND type_local = 'Appartement' ORDER BY prix_appt DESC LIMIT 10)	10 row(s) returned	0.280 sec / 0.00090...

6. Taux d'évolution du nombre de ventes entre le premier et le second trimestre de 2020.

The screenshot shows the MySQL Workbench interface with the following query in the SQL editor:

```
1 WITH trimestre1 AS
2 (SELECT COUNT(vente.date_mutation) AS Q1 FROM vente
3 WHERE vente.date_mutation BETWEEN '2020-01-01' AND '2020-03-31'),
4 trimestre2 AS
5 (SELECT COUNT(vente.date_mutation) AS Q2 FROM vente
6 WHERE vente.date_mutation BETWEEN '2020-04-01' AND '2020-06-30')
7 SELECT Q1 AS nombre_de_ventesQ1, Q2 AS nombre_de_ventesQ2,
8 ROUND((((Q2/Q1)-1)*100),2) AS taux_evolution_nombre_de_vente FROM trimestre1, trimestre2;
```

The Result Grid displays the following data:

nombre_de_ventesQ1	nombre_de_ventesQ2	taux_evolution_nombre_de_vente
16614	17232	3.72

The Action Output shows the query execution details:

Time	Action	Response	Duration / Fetch Time
16:29:05	WITH cte1 AS (SELECT ROUND(val_fonciere) AS prix_appt, surf_carrez AS nombre_m2, code_dept AS departement, type_local FROM bien,vente,commune WHERE vente.idvente = bien.idbien AND bien.id_commune = commune.idcommune AND type_local = 'Appartement' ORDER BY prix_appt DESC LIMIT 10)	10 row(s) returned	0.280 sec / 0.00090...

7. Liste des communes où le nombre de ventes a augmenté d'au moins 20% entre le premier et le second trimestre de 2020

The screenshot shows the MySQL Workbench interface. The SQL editor contains the following query:

```

3 FROM bien, commune, vente
4 WHERE bien.id_commune = commune.id_commune
5 AND vente.id_bien = bien.id_bien
6 AND vente.date_mutation BETWEEN '2020-01-01' AND '2020-03-31'
7 GROUP BY commune),
8 Q2 AS
9 (SELECT COUNT(type_local) AS nombre_de_venteQ2, commune AS comm2
10 FROM bien, commune, vente
11 WHERE bien.id_commune = commune.id_commune
12 AND vente.id_bien = bien.id_bien
13 AND vente.date_mutation BETWEEN '2020-04-01' AND '2020-06-30'
14 GROUP BY commune)
15 SELECT comm1, nombre_de_venteQ1, comm2, nombre_de_venteQ2,

```

The Result Grid shows the following data:

comm1	nombre_de_venteQ1	comm2	nombre_de_venteQ2	différence_en_pourcentage_de...
SAINT PIERRE	1	PREVESSIN-MOENS	2	100.00
SAINT-LEU	1	PREVESSIN-MOENS	2	100.00
MARIN	1	PREVESSIN-MOENS	2	100.00
SAINTE LUCE	1	PREVESSIN-MOENS	2	100.00
SAINT-JOSEPH	1	PREVESSIN-MOENS	2	100.00
VAUCLIN	1	PREVESSIN-MOENS	2	100.00
DIAMANT	1	PREVESSIN-MOENS	2	100.00
DUCOS	1	PREVESSIN-MOENS	2	100.00
SANT MARTIN	1	PREVESSIN-MOENS	2	100.00
LA FRETTE-SUR-SEINE	1	PREVESSIN-MOENS	2	100.00
MARGENCY	1	PREVESSIN-MOENS	2	100.00
FREPILLON	1	PREVESSIN-MOENS	2	100.00
VIARMES	1	PREVESSIN-MOENS	2	100.00

The Action Output shows the execution of the query with the following details:

Time	Action	Response	Duration / Fetch Time
16:29:05	WITH cte1 AS (SELECT ROUND(val_fonciere) AS prix_appt, surf_carrez AS nombre...	10 row(s) returned	0.280 sec / 0.00090...

8. Différence en pourcentage du prix au mètre carré entre un appartement de 2 pièces et un appartement de 3 pièces.

The screenshot shows the MySQL Workbench interface. The SQL editor contains the following query:

```

1 WITH App_2 AS
2 (SELECT ROUND(SUM(vente.val_fonciere)/SUM(bien.surf_carrez),2) AS prix_a_u_m2_App_2pieces
3 FROM vente, bien
4 WHERE vente.id_bien=bien.id_bien
5 AND bien.type_local = 'Appartement'
6 AND bien.no_pieces = 2),
7 App_3 AS
8 (SELECT ROUND(SUM(vente.val_fonciere)/SUM(bien.surf_carrez),2) AS prix_a_u_m2_App_3pieces
9 FROM vente, bien
10 WHERE vente.id_bien=bien.id_bien
11 AND bien.type_local = 'Appartement'
12 AND bien.no_pieces = 3)
13 SELECT prix_a_u_m2_App_2pieces, prix_a_u_m2_App_3pieces,
14 ROUND(((prix_a_u_m2_App_3pieces/prix_a_u_m2_App_2pieces)-1)*100,2) AS diff_en_pourcentage
15 FROM App_2, App_3;

```

The Result Grid shows the following data:

prix_a_u_m2_App_2pieces	prix_a_u_m2_App_3pieces	diff_en_pourcentage
4648.14	4122.25	-11.31

The Action Output shows the execution of the query with the following details:

Time	Action	Response	Duration / Fetch Time
16:29:05	WITH cte1 AS (SELECT ROUND(val_fonciere) AS prix_appt, surf_carrez AS nombre...	10 row(s) returned	0.280 sec / 0.00090...

9. Les moyennes de valeurs foncières pour le top 3 des communes des départements 6, 13, 33, 59 et 69

MySQL Workbench - EER Data Immo.mwb - MySQL Workbench

Administration Schemas SQL File 11* SQL File 12* SQL File 12* SQL File 13* SQL File 14* SQL File 15* SQL File 16* SQL File 17* SQL File 18* SQL File 19* Context... Snippets

SCHEMAS

Filter objects

Data Immo

Tables

bien

commune

vente

Views

Stored Proce...

Functions

sys

```

1 WITH cte1 AS
2 (SELECT ROW_NUMBER() OVER (PARTITION BY code_dept ORDER BY code_dept) AS top3_commune, ROUND(AVG(val_fonciere),2) AS Avg_fonciere,
3 commune, code_dept AS departement
4 FROM vente, commune, bien
5 WHERE bien.id_commune = commune.id_commune
6 AND vente.id_bien = bien.id_bien
7 AND code_dept IN (6,13,33,59,69)
8 GROUP BY commune, code_dept)
9 SELECT * FROM cte1 WHERE top3_commune <= 3;

```

100% 44:9

Object Info Session

Schema: Data Immo

top3_commune	Avg_fonciere	commune	departement
1	258451.70	NICE	6
2	240250.00	SAINT-ANDRE...	6
3	196856.03	LA TRINITE	6
1	149350.32	MARSEILLE 2E...	13
2	116718.63	MARSEILLE 4E...	13
3	157263.78	MARSEILLE 1ER	13
1	247553.70	BORDEAUX	33
2	208250.00	SANT-AUBIN D...	33
3	170440.00	PARMAYRE	33
1	213211.18	LILLE	59
2	214659.95	LA MADELEINE	59
3	92046.47	MONS EN BAR...	59
1	206556.20	ALBIGNY-SUR...	69
2	433847.99	LYON 2EME	69
3	182411.33	NEUVILLE SUR...	69

Result 3

Action Output

Time	Action	Response	Duration / Fetch Time
16:29:05	WITH cte1 AS (SELECT ROUND(val_fonciere) AS prix_appt, surf_carrez AS nombre_...	10 row(s) returned	0.280 sec / 0.00090...

Document loaded.