

Compte-rendu de réunion de validation

Rudy Desplan
Projet 3

Requêtes

- 1. Nombre total d'appartements vendus au 1er semestre 2020.
- 2. Proportion des ventes d'appartements par le nombre de pièces.
- 3. Liste des 10 départements où le prix du mètre carré est le plus élevé.
- 4. Prix moyen du mètre carré d'une maison en Île-de-France.
- 5. Liste des 10 appartements les plus chers avec le département et le nombre de mètres carrés.
- 6. Taux d'évolution du nombre de ventes entre le premier et le second trimestre de 2020.
- 7. Liste des communes où le nombre de ventes a augmenté d'au moins 20% entre le premier et le second trimestre de 2020
- 8. Différence en pourcentage du prix au mètre carré entre un appartement de 2 pièces et un appartement de 3 pièces.
- 9. Les moyennes de valeurs foncières pour le top 3 des communes des départements 6, 13, 33, 59 et 69

Reponses :

- 1 : 31362 appartements vendus au 1er semestre 2020 - Slide 4
- 2 : Slide 5
- 3 : Slide 6
- 4 : Prix moyen du mètre carré d'une maison en Île-de-France : 3745 Euros - Slide 7
- 5 : Slide 8
- 6 : Taux d'évolution du nombre de ventes entre le 1er et le 2nd trimestre de 2020 : +3,655% - Slide 9
- 7 : Slide 10,11,12
- 8 : Différence en pourcentage du prix au mètre carré entre un appartement de 2 pièces et un appartement de 3 pièces : -12,40 % - Slide 13
- 9 : Slide 14,15,16

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

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File Object Tools Help

Browser

Tables (3)

- adresse
 - Columns (3)
 - id_adresse
 - codedp
 - com
 - Constraints
 - Indexes
 - RLS Policies
 - Rules
 - Triggers
- bien
 - Columns (5)
 - Constraints
 - Indexes
 - RLS Policies
 - Rules
 - Triggers
- transaction
 - Columns (5)
 - Constraints
 - Indexes
 - RLS Policies
 - Rules
 - Triggers

Dashboard Properties SQL Proof_of_Concept/postgres@PostgreSQL 14 *

No limit

Query Editor Query History

```
1 select count(distinct id_bien) as Nombre_total_appartements_vendus
2 from bien natural join transaction
3 where val>0 and typel ='Appartement' and date between '2020-01-01' and '2020-06-30'
```

Data Output Explain Messages Notifications

	nombre_total_appartements_vendus	
1	31362	

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

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Browser

Tables (3)

- adresse
 - Columns (3)
 - id_adresse
 - codedp
 - com
 - Constraints
 - Indexes
 - RLS Policies
 - Rules
 - Triggers
- bien
 - Columns (5)
 - Constraints
 - Indexes
 - RLS Policies
 - Rules
 - Triggers
- transaction
 - Columns (5)
 - Constraints
 - Indexes
 - RLS Policies
 - Rules
 - Triggers

Dashboard Properties SQL Proof_of_Concept/postgres@PostgreSQL 14 *

No limit

Query Editor Query History

```
1 select bien.type_local as type_local, bien.nbrepp as nombre_pieces_principales, count(id_transaction) as nombre_vente, 100.0*(count(id_transaction))/(SELECT COUNT(id_transaction) from bien natural join transaction where val>0 and type_local = 'Appartement') as ratio
2
3 (SELECT COUNT(id_transaction) from bien natural join transaction where val>0 and type_local = 'Appartement')
4
5 100.0*(count(id_transaction))/(SELECT COUNT(id_transaction) from bien natural join transaction where val>0 and type_local = 'Appartement')
6
```

Data Output Explain Messages Notifications

	type_local character varying (12)	nombre_pieces_principales smallint	nombre_vente bigint	total bigint	ratio numeric	
1	Appartement	0	30	31362	0.09565716472163765066	
2	Appartement	1	6736	31362	21.4782220521650405	
3	Appartement	2	9773	31362	31.1619156941521587	
4	Appartement	3	8966	31362	28.5887379631401059	
5	Appartement	4	4458	31362	14.2146546776353549	
6	Appartement	5	1114	31362	3.5520693833301448	
7	Appartement	6	203	31362	0.64728014794974810280	
8	Appartement	7	54	31362	0.17218289649894777119	
9	Appartement	8	17	31362	0.05420572667559466871	
10	Appartement	9	8	31362	0.02550857725910337351	
11	Appartement	10	2	31362	0.00637714431477584338	
12	Appartement	11	1	31362	0.00318857215738792169	

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

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Browser

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Query Editor Query History

```
1 select adresse.codedp, ROUND(AVG(val/surfc) ,2) AS Prix_M2
2 From transaction natural join bien natural join adresse
3 where surfc>0 and val>0
4 Group by codedp
5 order by Prix_M2 DESC Limit 10;
```

Data Output Explain Messages Notifications

	codedp character varying (3)	prix_m2 numeric
1	75	12052.89
2	92	7219.39
3	94	5343.28
4	6	4700.33
5	74	4667.13
6	93	4344.78
7	78	4225.25
8	69	4059.31
9	2A	4026.97
10	33	3764.14

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

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 - < Tables (3)
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 - < bien
 - < Columns (5)
 - id_bien
 - id_adresse
 - typel
 - nbrepp
 - surfc
 - > Constraints
 - > Indexes

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

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Browser



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 - ▽ Tables (3)
 - > adresse
 - ▽ bien
 - ▽ Columns (5)
 - id_bien
 - id_adresse
 - typel
 - nbrepp
 - surfcl
 - > Constraints
 - > Indexes



Query Editor Query History

```
1 select bien.id_bien, adresse.codedp as code_departement, bien.surfcl as nombre_M2, transaction.val as val
2
3 from bien natural join adresse natural join transaction
4
5 where val>0 and typel = 'Appartement'
6
7 group by id_bien,code_departement,nombre_M2,valeur_fonciere
8
9
```

Data Output Explain Messages Notifications

	id_bien: integer	code_departement: character varying (3)	nombre_m2: numeric	valeur_fonciere: numeric
1	30726	75	9.1	9000000
2	5334	91	64	8600000
3	3757	75	20.55	8577713
4	7760	75	42.77	7620000
5	10112	75	253.3	7600000
6	17905	75	139.9	7535000
7	516	75	360.95	7420000
8	16385	75	595	7200000
9	2039	75	122.56	7050000
10	19387	75	79.38	6600000

6. Taux d'évolution du nombre de ventes entre le 1ier et le 2nd trimestre de 2020.

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File Object Tools Help

Browser

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Query Editor Query History

```
1 with
2 T1 as(
3 Select Count(id_transaction) as nbreventes1
4 from transaction where val>0 and date Between '2020-01-01' and '2020-03-31',
5
6 T2 as(
7 Select Count(id_transaction) as nbreventes2
8 from transaction where val>0 and date Between '2020-04-01' and '2020-06-30',
9
10 T3 as(
11 select nbreventes2-nbreventes1 as difference
12 from T1,T2)
13
14 select difference*100.0/nbreventes1 as taux_evolution_vente
15 from T3 natural join T1
```

Data Output Explain Messages Notifications

	taux_evolution_vente
1	3.6555548929572425

public

Schemas (1)

public

Collations

Domains

FTS Configurations

FTS Dictionaries

FTS Parsers

FTS Templates

Foreign Tables

Functions

Materialized Views

Procedures

Sequences

Tables (3)

adresse

bien

Columns (5)

id_bien

id_adresse

typel

nbreprp

surfcl

Constraints

Indexes

7. Liste des communes où le nombre de ventes a augmenté d'au moins 20% entre le 1er et le 2nd trimestre de 2020 (A)

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Browser Publications Schemas (1) public Collations Domains FTS Configurations FTS Dictionaries FTS Parsers FTS Templates Foreign Tables Functions Materialized Views Procedures Sequences Tables (3) adresse bien Columns (5) id_bien id_adresse type nbrepp surfc Constraints Indexes

Dashboard Properties SQL Proof_of_Concept/postgres@PostgreSQL 14 *

No limit ▾

Query Editor Query History

```
1 with
2 T1 as(
3 select count(id_transaction) as nombre_vente_T1, adresse.com as commune
4 from transaction natural join bien natural join adresse
5 where val>0 and date between '2020-01-01' and '2020-03-31'
6 group by commune
7 order by commune ASC),
8 T2 as (
9 select count(id_transaction) as nombre_vente_T2, adresse.com as commune
10 from transaction natural join bien natural join adresse
11 where val>0 and date between '2020-04-01' and '2020-06-30'
12 group by commune
13 order by commune ASC)
14 select nombre_vente_T1,nombre_vente_T2, nombre_vente_T2-nombre_vente_T1 as difference, commune,
15 (100.0*(nombre_vente_T2-nombre_vente_T1)/nombre_vente_T1) as evolution
16 from T1 natural join T2 natural join adresse
17 where (100.0*(nombre_vente_T2-nombre_vente_T1)/nombre_vente_T1) >= 20
18 group by nombre_vente_T1, nombre_vente_T2, difference, commune
19 order by evolution ASC
```

Data Output Explain Messages Notifications

	nombre_vente_t1	nombre_vente_t2	difference	commune	evolution
	bigint	bigint	bigint	character varying (45)	numeric
1	5	6	1	SAINTE FOY LES LYON	20.000000000000000000

7. (B)

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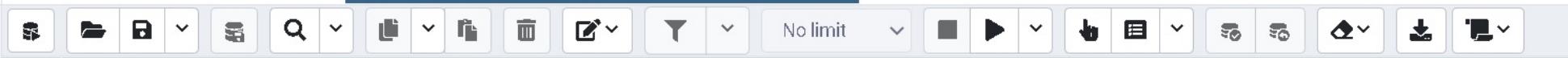
Browser



Dashboard Properties SQL Proof_of_Concept/postgres@PostgreSQL 14 *



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& Proof_of_Concept/postgres@PostgreSQL 14 *

Query Editor Query History

```

1 with
2 T1 as(
3 select count(id_transaction) as nombre_vente_T1, adresse.com as commune

```

Data Output Explain Messages Notifications

	nombre_vente_t1 bigint	nombre_vente_t2 bigint	difference bigint	commune character varying (45)	evolution numeric
1		5	6	1 SAINTE FOY LES LYON	20.000000000000000000
2		10	12	2 LA QUEUE-EN-BRIE	20.000000000000000000
3		25	30	5 ARCACHON	20.000000000000000000
4		10	12	2 LE BEAUSSET	20.000000000000000000
5		5	6	1 BESSANCOURT	20.000000000000000000
6		5	6	1 GOLBEY	20.000000000000000000
7		15	18	3 SAINT-HILAIRE-DE-RIEZ	20.000000000000000000
8		5	6	1 DIVONNE-LES-BAINS	20.000000000000000000
9		5	6	1 SCHOELCHER	20.000000000000000000
10		5	6	1 GIVORS	20.000000000000000000
11		5	6	1 CHESSY	20.000000000000000000
12		5	6	1 BRIANCON	20.000000000000000000
13		29	35	6 LEUCATE	20.6896551724137931
14		24	29	5 ETAMPES	20.833333333333333333

7. (C)

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No limit

Proof_of_Concept/postgres@PostgreSQL 14

Query Editor Query History

```
1 with
2 T1 as(
3 select count(id_transaction) as nombre_vente_T1, adresse.com as commune
```

Data Output Explain Messages Notifications

Successfully run. Total query runtime: 19 secs 602 msec.

575 rows affected.

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

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Dashboard Properties SQL Proof_of_Conc... Proof_of_Concept/postgres@PostgreSQL 14 *

No limit

Query Editor Query History

```
1 with
2 Deux_Pieces as(
3 select avg(val/surfcc) as Deux_Pieces_PrixM2
4 From transaction natural join bien
5 where val>0 and nbrepp =2 and typel ='Appartement'),
6
7 Trois_Pieces as(
8 select avg(val/surfcc) as Trois_Pieces_PrixM2
9 From transaction natural join bien
10 where val>0 and nbrepp =3 and typel ='Appartement'),
11
12 Diff as (
13 select Trois_Pieces_PrixM2-Deux_Pieces_PrixM2 as difference
14 from Deux_Pieces,Trois_Pieces)
15 select Deux_Pieces_PrixM2, Trois_Pieces_PrixM2 , difference,
16 (difference*100.0 / Deux_Pieces_PrixM2) as Difference_pourcentage
17 from Deux_Pieces,Trois_Pieces,Diff
```

Data Output Explain Messages Notifications

	deux_pieces_prixm2	trois_pieces_prixm2	difference	difference_pourcentage
1	4908.5821342462339922	4299.8985499595221750	-608.6835842867118172	-12.40039521881570351

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

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Browser Dashboard Properties SQL Proof_of_Concept/postgres@PostgreSQL 14 *

Proof_of_Concept/postgres@PostgreSQL 14 ▾

Query Editor Query History

```
2 Moyenne_Val06 as(
3   SELECT codedp as code_departement, avg(val/surfcc) as valeur_moyenne, com as commune
4   from adresse natural join bien natural join transaction
5   where val>0 and codedp = '6'
6   GROUP BY commune, code_departement ORDER BY valeur_moyenne DESC limit 3),
7 Moyenne_Val13 as(
8   SELECT codedp as code_departement, avg(val/surfcc) as valeur_moyenne, com as commune
9   from adresse natural join bien natural join transaction
10  where val>0 and codedp = '13'
11  GROUP BY commune, code_departement ORDER BY valeur_moyenne DESC limit 3),
12 Moyenne_Val33 as(
13   SELECT codedp as code_departement, avg(val/surfcc) as valeur_moyenne, com as commune
14   from adresse natural join bien natural join transaction
15   where val>0 and codedp = '33'
16   GROUP BY commune, code_departement ORDER BY valeur_moyenne DESC limit 3),
17 Moyenne_Val59 as(
18   SELECT codedp as code_departement, avg(val/surfcc) as valeur_moyenne, com as commune
19   from adresse natural join bien natural join transaction
20   where val>0 and codedp = '59'
21   GROUP BY commune, code_departement ORDER BY valeur_moyenne DESC limit 3)
```

Data Output Explain Messages Notifications

	code_departement	valeur_moyenne	commune
1	6	14106.0245424608670852	SAINT-JEAN-CAP-FERRAT

9. (B)

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 - > Tables (3)
 - adresse
 - bien
 - > Columns (5)
 - id_bien
 - id_adresse
 - type
 - nbrepp
 - surf
 - > Constraints
 - > Indexes



Proof_of_Concept/postgres@PostgreSQL 14 *

Query Editor Query History

```
11 GROUP BY commune, code_departement ORDER BY valeur_moyenne DESC limit 3),  
12 Moyenne_Val33 as(  
13 SELECT codedp as code_departement, avg(val/surfc) as valeur_moyenne, com as commune  
14 from adresse natural join bien natural join transaction  
15 where val>0 and codedp ='33'  
16 GROUP BY commune, code_departement ORDER BY valeur_moyenne DESC limit 3),  
17 Moyenne_Val59 as(  
18 SELECT codedp as code_departement, avg(val/surfc) as valeur_moyenne, com as commune  
19 from adresse natural join bien natural join transaction  
20 where val>0 and codedp ='59'  
21 GROUP BY commune, code_departement ORDER BY valeur_moyenne DESC limit 3),  
22 Moyenne_Val69 as(  
23 SELECT codedp as code_departement, avg(val/surfc) as valeur_moyenne, com as commune  
24 from adresse natural join bien natural join transaction  
25 where val>0 and codedp ='69'  
26 GROUP BY commune, code_departement ORDER BY valeur_moyenne DESC limit 3)  
27 select * from Moyenne_Val06 union all select * from Moyenne_Val13 union all  
28 select * from Moyenne_Val33 union all select * from Moyenne_Val59 union all  
29 select * from Moyenne_Val69;
```

Data Output Explain Messages Notifications

	code_departement character varying (3)	valeur_moyenne numeric	commune character varying (45)	
1	6	14106.0245424608670852	SAINT-JEAN-CAP-FERRAT	

9. (C)

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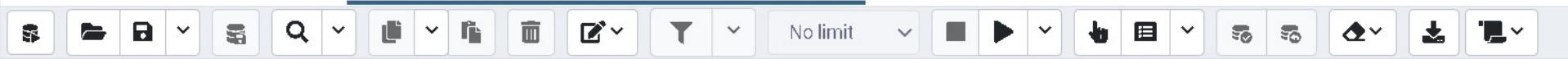
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Dashboard Properties SQL Proof_of_Concept/postgres@PostgreSQL 14 *

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 - > Columns (5)
 - id_bien
 - id_adresse
 - typep
 - nbrepp
 - surfc
 - > Constraints
 - > Indexes



No limit

Proof_of_Concept/postgres@PostgreSQL 14 *

Query Editor Query History

```
11 GROUP BY commune, code_departement ORDER BY valeur_moyenne DESC limit 3),  
12 Moyenne_Val33 as(  
13 SELECT codedp as code_departement, avg(val/surfc) as valeur_moyenne, com as commune  
14 FROM bien  
15 GROUP BY commune, code_departement ORDER BY valeur_moyenne DESC limit 3)
```

Data Output Explain Messages Notifications

	code_departement character varying (3)	valeur_moyenne numeric	commune character varying (45)
1	6	14106.0245424608670852	SAINT-JEAN-CAP-FERRAT
2	6	10153.4418587592540529	CAP-D'AIL
3	6	8262.2955845187511573	VILLEFRANCHE-SUR-MER
4	13	6439.3202143782812729	CASSIS
5	13	5310.8808290155440415	SAINT-REMY-DE-PROVENCE
6	13	4439.0637610976594027	GIGNAC-LA-NERTHE
7	33	7245.1422973665132562	LEGE-CAP-FERRET
8	33	6451.7896975369156306	ARCACHON
9	33	4868.1143769912665076	ANDERNOS-LES-BAINS
10	59	6521.2765957446808511	FOURNES-EN-WEPPE
11	59	5569.8385935150427717	HALLUIN
12	59	4630.2195640534108282	ARMENTIERES
13	69	15815.0851581508520000	LAMURE SUR AZERGUES
14	69	14163.2653061224490000	SAINT GEORGES DE RENEINS
15	69	11619.2200662620506017	COLLONES-SAINTE-MARIE