

LISTE DES REQUÊTES ET RÉSULTATS

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

```
SELECT COUNT(DISTINCT idBien) FROM Bien WHERE typeDeBien = "appartement" ;
```

```
mysql> SELECT COUNT(DISTINCT idBien) FROM Bien WHERE typeDeBien = "appartement" ;
+-----+
| COUNT(DISTINCT idBien) |
+-----+
|                31357 |
+-----+
1 row in set (0,02 sec)
```

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

```
SET @total = (SELECT COUNT(*) FROM (SELECT * FROM Bien WHERE typeDeBien = "appartement") as nb_appt);
```

```
mysql> SET @total = (SELECT COUNT(*) FROM (SELECT * FROM Bien WHERE typeDeBien = "appartement") as nb_appt);
Query OK, 0 rows affected (0,03 sec)
```

```
SELECT nombreDePieces, COUNT(*)/@total*100 AS pourcentage_ventes
FROM (SELECT * FROM Bien WHERE typeDeBien = "appartement") as
prop_ventes GROUP BY nombreDePieces ;
```

```
mysql> SELECT nombreDePieces, COUNT(*)/@total*100 AS pourcentage_ventes FROM (SELECT * FROM Bien WHERE typeDeBien = "appartement") as prop_ventes GROUP BY nombreDePieces;
+-----+-----+
| nombreDePieces | pourcentage_ventes |
+-----+-----+
| 3 | 28.5710 |
| 4 | 14.2105 |
| 1 | 21.4625 |
| 2 | 31.1956 |
| 5 | 3.5526 |
| 10 | 0.0064 |
| 6 | 0.6506 |
| 0 | 0.0957 |
| 8 | 0.0542 |
| 7 | 0.1722 |
| 9 | 0.0255 |
| 11 | 0.0032 |
+-----+-----+
12 rows in set (0,03 sec)
```

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

```
SELECT codeDepartement, AVG(valeurFonciere/surfaceCarrez) AS prixMoyenm2 FROM (SELECT * FROM Mutation JOIN Bien ON Mutation.Bien_idBien = Bien.idBien JOIN Commune ON Bien.Commune_idCommune = Commune.idCommune) as prixpardept GROUP BY codeDepartement ORDER BY prixMoyenm2 DESC LIMIT 10 ;
```

```
mysql> SELECT codeDepartement, AVG(valeurFonciere/surfaceCarrez) AS prixMoyenm2 FROM (SELECT * FROM Mutation JOIN Bien ON Mutation.Bien_idBien = Bien.idBien JOIN Commune ON Bien.Commune_idCommune = Commune.idCommune) as prixpardept GROUP BY codeDepartement ORDER BY prixMoyenm2 DESC LIMIT 10;
+-----+-----+
| codeDepartement | prixMoyenm2 |
+-----+-----+
| 75              | 12086.470918375247 |
| 92              | 7300.6598013764515 |
| 94              | 5427.865876109609 |
| 6              | 4812.860134231499 |
| 74              | 4781.394537302811 |
| 93              | 4385.746206169739 |
| 78              | 4275.575227795191 |
| 69              | 4097.663166634155 |
| 2A              | 4062.9127852010074 |
| 33              | 3807.2356715505325 |
+-----+-----+
10 rows in set, 3 warnings (0,10 sec)
```

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

```
SELECT AVG(valeurFonciere/surfaceCarrez) AS prixMoyenm2 FROM Mutation JOIN Bien ON Mutation.Bien_idBien = Bien.idBien JOIN Commune ON Bien.Commune_idCommune = Commune.idCommune WHERE codeDepartement IN (75, 77, 78, 91, 92, 93, 94, 95) AND typeDeBien = "maison";
```

```
mysql> SELECT AVG(valeurFonciere/surfaceCarrez) AS prixMoyenm2 FROM Mutation JOIN Bien ON Mutation.Bien_idBien = Bien.idBien JOIN Commune ON Bien.Commune_idCommune = Commune.idCommune WHERE codeDepartement IN (75, 77, 78, 91, 92, 93, 94, 95) AND typeDeBien = "Maison";
+-----+
| prixMoyenm2 |
+-----+
| 3765.6012114524983 |
+-----+
1 row in set, 28 warnings (0,05 sec)
```

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

```
SELECT idBien, codeDepartement, surfaceReelle, valeurFonciere FROM
(SELECT * FROM Mutation JOIN Bien ON Mutation.Bien_idBien =
Bien.idBien JOIN Commune ON Bien.Commune_idCommune =
Commune.idCommune) as jointure WHERE typeDeBien = "appartement"
ORDER BY valeurFonciere DESC LIMIT 10 ;
```

```
mysql> SELECT idBien, codeDepartement, surfaceCarrez, valeurFonciere FROM (SELECT * FROM Mutation JOIN Bien ON Mutation.Bien_idBien = Bien.idBien JOIN Commune ON Bien.Commune_idCommune = Commune.idCommune) as jointure WHERE typeDeBien = "appartement" ORDER BY valeurFonciere DESC LIMIT 10;
+-----+-----+-----+-----+
| idBien | codeDepartement | surfaceCarrez | valeurFonciere |
+-----+-----+-----+-----+
| 2192 | 75 | 9 | 9000000 |
| 12351 | 91 | 64 | 8600000 |
| 4307 | 75 | 20 | 8577710 |
| 1702 | 75 | 42 | 7620000 |
| 4349 | 75 | 253 | 7600000 |
| 4696 | 75 | 139 | 7535000 |
| 2036 | 75 | 360 | 7420000 |
| 1870 | 75 | 595 | 7200000 |
| 4624 | 75 | 122 | 7050000 |
| 4684 | 75 | 79 | 6600000 |
+-----+-----+-----+-----+
10 rows in set (0,08 sec)
```

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

```
SELECT DISTINCT (((SELECT COUNT(*) FROM Mutation WHERE dateMutation
> "2020-03-31") - (SELECT COUNT(*) FROM Mutation WHERE dateMutation
< "2020-04-01") / (SELECT COUNT(*) FROM Mutation WHERE dateMutation
< "2020-04-01")*100) AS taux_evolution FROM Mutation ;
```

```
mysql> SELECT DISTINCT (((SELECT COUNT(*) FROM Mutation WHERE dateMutation > "2020-03-31") - (SELECT COUNT(*) FROM Mutation WHERE dateMutation < "2020-04-01")) / (SELECT COUNT(*) FROM Mutation WHERE dateMutation < "2020-04-01")*100) AS taux_evolution FROM Mutation;
+-----+
| taux_evolution |
+-----+
| 3.6845 |
+-----+
1 row in set (0,04 sec)
```

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

```
CREATE VIEW ventes_t2 AS SELECT idCommune id2, COUNT(*) AS nbventest2 FROM Mutation JOIN Bien ON Mutation.Bien_idBien = Bien.idBien JOIN Commune ON Bien.Commune_idCommune = Commune.idCommune WHERE dateMutation > "2020-03-31" GROUP BY idCommune ;
```

```
CREATE VIEW ventes_t1 AS SELECT idCommune id1, COUNT(*) AS nbventest1 FROM Mutation JOIN Bien ON Mutation.Bien_idBien = Bien.idBien JOIN Commune ON Bien.Commune_idCommune = Commune.idCommune WHERE dateMutation < "2020-04-01" GROUP BY idCommune ;
```

```
mysql> CREATE VIEW ventes_t2 AS SELECT idCommune id2, COUNT(*) AS nbventest2 FROM Mutation JOIN Bien ON Mutation.Bien_idB
ien = Bien.idBien JOIN Commune ON Bien.Commune_idCommune = Commune.idCommune WHERE dateMutation > "2020-03-31" GROUP BY i
dCommune;
Query OK, 0 rows affected (0,00 sec)

mysql> CREATE VIEW ventes_t1 AS SELECT idCommune id1, COUNT(*) AS nbventest1 FROM Mutation JOIN Bien ON Mutation.Bien_idB
ien = Bien.idBien JOIN Commune ON Bien.Commune_idCommune = Commune.idCommune WHERE dateMutation < "2020-04-01" GROUP BY i
dCommune;
Query OK, 0 rows affected (0,00 sec)
```

```
SELECT * FROM (SELECT id1, nomCommune, ((nbventest2-
nbventest1)/nbventest1*100) AS taux_evolution FROM ventes_t1 JOIN
ventes_t2 ON ventes_t1.id1 = ventes_t2.id2 JOIN Commune ON
ventes_t2.id2 = Commune.idCommune) as jointure WHERE taux_evolution
>= '20' ;
```

```
mysql> SELECT * FROM (SELECT id1, nomCommune, ((nbventest2-nbventest1)/nbventest1*100) AS taux_evolution FROM ventes_t1 J
OIN ventes_t2 ON ventes_t1.id1 = ventes_t2.id2 JOIN Commune ON ventes_t2.id2 = Commune.idCommune) as jointure WHERE taux_
evolution >= '20';
```

id1	nomCommune	taux_evolution
2	DIVONNE-LES-BAINS	20.0000
55	LAON	27.2727
65	VILLERS-COTTERETS	66.6667
80	CHATEAU-ARNOUX-SAINT-AUBAN	100.0000
90	BARCELONNETTE	150.0000
92	SAINT-MARTIN-DE-BROMES	100.0000
114	EMBRUN	100.0000
116	BRIANCON	20.0000
117	ORCIERES	400.0000
120	GAP	200.0000
121	LE DEVOLUY	1000.0000
124	LA SALLE	200.0000
129	RISOUL	100.0000
144	NICE	39.1304
148	NICE	84.8485
149	MENTON	27.5000
172	SAINT-MARTIN-VESUBIE	200.0000
181	GILETTE	100.0000
185	LEVENS	300.0000
186	BEUIL	100.0000
205	ANTIBES	20.8333
222	VALBONNE	100.0000
232	VALS-LES-BAINS	33.3333
237	LA-VOULTE-SUR-RHONE	200.0000
258	CHARLEVILLE-MEZIERES	100.0000
259	GIVET	200.0000
261	RETHEL	600.0000
262	SEDAN	50.0000
281	TROYES	73.5294

```

| 3147 | SAINT-PRIX          | 50.0000 |
| 3150 | MONTMAGNY           | 30.0000 |
| 3153 | SANNOIS             | 75.0000 |
| 3154 | HERBLAY-SUR-SEINE   | 31.2500 |
| 3155 | ARGENTEUIL          | 68.9655 |
| 3157 | BEZONS              | 125.0000 |
| 3162 | SCHOELCHER          | 20.0000 |
| 3163 | MARIN               | 100.0000 |
| 3164 | FORT DE FRANCE      | 22.2222 |
| 3165 | TROIS ILETS         | 33.3333 |
| 3167 | DUCOS               | 233.3333 |
| 3168 | LE LAMENTIN         | 33.3333 |
| 3172 | SAINTE LUCE         | 200.0000 |
| 3182 | MATOURY             | 100.0000 |
| 3186 | SAINT DENIS         | 60.0000 |
| 3187 | SAINT DENIS         | 66.6667 |
| 3189 | SAINT-PAUL          | 200.0000 |
| 3196 | PARIS 01            | 32.3529 |
| 3197 | PARIS 08            | 24.1935 |
| 3201 | PARIS 10            | 42.2018 |
| 3203 | PARIS 11            | 26.6272 |
| 3204 | PARIS 12            | 30.9091 |
| 3208 | PARIS 16            | 38.7879 |
| 3210 | PARIS 18            | 46.8900 |
| 3211 | PARIS 20            | 38.5827 |
| 3212 | PARIS 19            | 30.1724 |
+-----+-----+-----+
605 rows in set (0,10 sec)

```

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

```

SET @pma3p = (SELECT AVG(valeurFonciere/surfaceCarrez) FROM (SELECT
* FROM Mutation JOIN Bien ON Mutation.Bien_idBien = Bien.idBien JOIN
Commune ON Bien.Commune_idCommune = Commune.idCommune WHERE
typeDeBien = "appartement" AND nombreDePieces = "3")as jointure) ;

```

```

SET @pma2p = (SELECT AVG(valeurFonciere/surfaceCarrez) FROM (SELECT
* FROM Mutation JOIN Bien ON Mutation.Bien_idBien = Bien.idBien JOIN
Commune ON Bien.Commune_idCommune = Commune.idCommune WHERE
typeDeBien = "appartement" AND nombreDePieces = "2")as jointure) ;

```

```

mysql> SET @pma3p = (SELECT AVG(valeurFonciere/surfaceCarrez) FROM (SELECT * FROM Mutation JOIN Bien ON Mutation.Bien_idB
ien = Bien.idBien JOIN Commune ON Bien.Commune_idCommune = Commune.idCommune WHERE typeDeBien = "appartement" AND nombreD
ePieces = "3")as jointure);
Query OK, 0 rows affected (0,05 sec)

mysql> SET @pma2p = (SELECT AVG(valeurFonciere/surfaceCarrez) FROM (SELECT * FROM Mutation JOIN Bien ON Mutation.Bien_idB
ien = Bien.idBien JOIN Commune ON Bien.Commune_idCommune = Commune.idCommune WHERE typeDeBien = "appartement" AND nombreD
ePieces = "2")as jointure);
Query OK, 0 rows affected (0,05 sec)

```

```

SELECT DISTINCT ((@pma3p-@pma2p)/@pma2p*100) AS
difference_pm_m2_2p3p ;

```

```
mysql> SELECT DISTINCT ((@pma3p-@pma2p)/@pma2p*100) AS difference_pm_m2_2p3p;
+-----+
| difference_pm_m2_2p3p |
+-----+
| -12.787270767730293 |
+-----+
1 row in set (0,00 sec)
```

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

```
SELECT idCommune, nomCommune, codeDepartement, AVG(DISTINCT
valeurFonciere) AS prixmoyen FROM (SELECT * FROM Mutation JOIN Bien
ON Mutation.Bien_idBien = Bien.idBien JOIN Commune ON
Bien.Commune_idCommune = Commune.idCommune)as jointure WHERE
codeDepartement = '6' GROUP BY idCommune ORDER BY prixmoyen DESC
LIMIT 3 ;
```

```
mysql> SELECT idCommune, nomCommune, codeDepartement, AVG(DISTINCT valeurFonciere) AS prixmoyen FROM (SELECT * FROM Mutation JOIN Bien
ON Mutation.Bien_idBien = Bien.idBien JOIN Commune ON Bien.Commune_idCommune = Commune.idCommune)as jointure WHERE codeDepartement = '6' GROUP BY idCommune ORDER BY prixmoyen DESC LIMIT 3;
+-----+-----+-----+-----+
| idCommune | nomCommune | codeDepartement | prixmoyen |
+-----+-----+-----+-----+
| 184 | SAINT-JEAN-CAP-FERRAT | 6 | 968750 |
| 180 | EZE | 6 | 655000 |
| 202 | MOUANS-SARTOUX | 6 | 476898 |
+-----+-----+-----+-----+
3 rows in set (0,00 sec)
```

```
SELECT idCommune, nomCommune, codeDepartement, AVG(DISTINCT
valeurFonciere) AS prixmoyen FROM (SELECT * FROM Mutation JOIN Bien
ON Mutation.Bien_idBien = Bien.idBien JOIN Commune ON
Bien.Commune_idCommune = Commune.idCommune)as jointure WHERE
codeDepartement = '13' GROUP BY idCommune ORDER BY prixmoyen DESC
LIMIT 3 ;
```

```
mysql> SELECT idCommune, nomCommune, codeDepartement, AVG(DISTINCT valeurFonciere) AS prixmoyen FROM (SELECT * FROM Mutation JOIN Bien
ON Mutation.Bien_idBien = Bien.idBien JOIN Commune ON Bien.Commune_idCommune = Commune.idCommune)as jointure WHERE codeDepartement = '13' GROUP BY idCommune ORDER BY prixmoyen DESC LIMIT 3;
+-----+-----+-----+-----+
| idCommune | nomCommune | codeDepartement | prixmoyen |
+-----+-----+-----+-----+
| 346 | MARSEILLE 12EME | 13 | 399500 |
| 356 | GIGNAC-LA-NERTHE | 13 | 330000 |
| 336 | SAINT SAVOURNIN | 13 | 314425 |
+-----+-----+-----+-----+
3 rows in set (0,01 sec)
```

```
SELECT idCommune, nomCommune, codeDepartement, AVG(DISTINCT
valeurFonciere) AS prixmoyen FROM (SELECT * FROM Mutation JOIN Bien
ON Mutation.Bien_idBien = Bien.idBien JOIN Commune ON
Bien.Commune_idCommune = Commune.idCommune)as jointure WHERE
codeDepartement = '33' GROUP BY idCommune ORDER BY prixmoyen DESC
LIMIT 3 ;
```

```
mysql> SELECT idCommune, nomCommune, codeDepartement, AVG(DISTINCT valeurFonciere) AS prixmoyen FROM (SELECT * FROM Mutation JOIN Bien ON Mutation.Bien_idBien = Bien.idBien JOIN Commune ON Bien.Commune_idCommune = Commune.idCommune)as jointure WHERE codeDepartement = '33' GROUP BY idCommune ORDER BY prixmoyen DESC LIMIT 3;
```

idCommune	nomCommune	codeDepartement	prismoyen
854	LA TESTE-DE-BUCH	33	705000
822	LEGE-CAP-FERRET	33	695051
873	VAYRES	33	335000

3 rows in set (0,01 sec)

```
SELECT idCommune, nomCommune, codeDepartement, AVG(DISTINCT valeurFonciere) AS prixmoyen FROM (SELECT * FROM Mutation JOIN Bien ON Mutation.Bien_idBien = Bien.idBien JOIN Commune ON Bien.Commune_idCommune = Commune.idCommune)as jointure WHERE codeDepartement = '59' GROUP BY idCommune ORDER BY prixmoyen DESC LIMIT 3 ;
```

```
mysql> SELECT idCommune, nomCommune, codeDepartement, AVG(DISTINCT valeurFonciere) AS prixmoyen FROM (SELECT * FROM Mutation JOIN Bien ON Mutation.Bien_idBien = Bien.idBien JOIN Commune ON Bien.Commune_idCommune = Commune.idCommune)as jointure WHERE codeDepartement = '59' GROUP BY idCommune ORDER BY prixmoyen DESC LIMIT 3;
```

idCommune	nomCommune	codeDepartement	prismoyen
1665	BERSEE	59	433202
1662	CYSOING	59	408550
1672	HALLUIN	59	322250

3 rows in set (0,00 sec)

```
SELECT idCommune, nomCommune, codeDepartement, AVG(DISTINCT valeurFonciere) AS prixmoyen FROM (SELECT * FROM Mutation JOIN Bien ON Mutation.Bien_idBien = Bien.idBien JOIN Commune ON Bien.Commune_idCommune = Commune.idCommune)as jointure WHERE codeDepartement = '69' GROUP BY idCommune ORDER BY prixmoyen DESC LIMIT 3 ;
```

```
mysql> SELECT idCommune, nomCommune, codeDepartement, AVG(DISTINCT valeurFonciere) AS prixmoyen FROM (SELECT * FROM Mutation JOIN Bien ON Mutation.Bien_idBien = Bien.idBien JOIN Commune ON Bien.Commune_idCommune = Commune.idCommune)as jointure WHERE codeDepartement = '69' GROUP BY idCommune ORDER BY prixmoyen DESC LIMIT 3;
```

idCommune	nomCommune	codeDepartement	prismoyen
2023	VILLE SUR JARNIOUX	69	485300
1906	LYON 2EME	69	451389.57352941175
1929	LYON 6EME	69	426968.25

3 rows in set (0,01 sec)