

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

```
SELECT COUNT(*) AS nombre_total_app_vendus_au_1er_semestre_2020
FROM Mutation JOIN Objet ON Mutation.id_objet = Objet.id
WHERE Objet.type_local = 'Appartement';
```

```
NOMBRE_TOTAL_APP_VENDUS_AU_1ER_SEMESTRE_2020
-----
31378
```

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

```
SELECT Objet.nombre_pieces AS nombre_pieces, CONCAT(CAST(ROUND((COUNT(*)/(SUM(COUNT(*)
over())*100), 2) AS DECIMAL(4,2)), '%') AS proportion_des_ventes_par_nombre_pieces
FROM Mutation
JOIN Objet ON Mutation.id_objet = Objet.id
WHERE Objet.type_local = 'Appartement'
GROUP BY Objet.nombre_pieces;
```

```
NOMBRE_PIECES    PROPORTION_DES_VENTES_PAR_NOMBRE_PIECES
-----
0    .10%
1    21.48%
2    31.18%
3    28.57%
4    14.21%
5    3.55%
6    .65%
7    .17%
8    .05%
9    .03%
10   .01%
11   .00%
```

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

```
SELECT Commune.code_departement AS code_departement, Departement.nom AS nom_departement,
CAST(ROUND(AVG(Mutation.valeur_fonciere/Objet.surface_bati), 2) AS DECIMAL(8,2)) AS
prix_metre_carre
FROM Mutation
JOIN Objet ON Mutation.id_objet = Objet.id
JOIN Adresse ON Objet.id_adresse=Adresse.id
JOIN Commune ON Adresse.id_commune=Commune.id
JOIN Departement ON Commune.code_departement=Departement.code
GROUP BY Commune.code_departement, Departement.nom
ORDER BY prix_metre_carre DESC LIMIT 10;
```

```
CODE_DEPARTEMENT  NOM_DEPARTEMENT  PRIX_METRE_CARRE
-----
75    PARIS    12129.39
92    HAUTS-DE-SEINE    7415.28
94    VAL-DE-MARNE    5398.78
6    ALPES-MARITIMES    4685.25
93    SEINE-ST-DENIS    4371.14
74    HAUTE-SAVOIE    4149.56
78    YVELINES    4126.19
69    RHONE    4063.83
2A    CORSE-DU-SUD    3921.65
33    GIRONDE    3838.74
```

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

```
SELECT CAST(ROUND(AVG(Mutation.valeur_fonciere/Objet.surface_bati), 2) AS DECIMAL (8,2))
AS prix_moyen_metre_carre_ile_de_france
FROM Mutation
JOIN Objet ON Mutation.id_objet = Objet.id
JOIN Adresse ON Objet.id_adresse=Adresse.id
JOIN Commune ON Adresse.id_commune=Commune.id
WHERE Objet.type_local='Maison' AND Commune.code_departement IN ('75', '92', '93', '94',
```

'77', '78', '91', '95');

PRIX_MOYEN_METRE_CARRE_ILE_DE_FRANCE

3997.71

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

```
SELECT
trim(Adresse.numero_voie || ' ' || Adresse.abr_type_voie || ' ' || Adresse.nom_voie || ',
' || Adresse.code_postal || ' ' || Commune.nom) AS adresse,
Mutation.valeur_fonciere AS prix,
Departement.nom AS departement,
Objet.surface_bati AS metres_carres
FROM Mutation
JOIN Objet ON Mutation.id_objet = Objet.id
JOIN Adresse ON Objet.id_adresse=Adresse.id
JOIN Commune ON Adresse.id_commune=Commune.id
JOIN Departement ON Commune.code_departement = Departement.code
WHERE Objet.type_local='Appartement' AND Mutation.valeur_fonciere != 0
ORDER BY prix DESC LIMIT 10;
```

| ADRESSE | PRIX | DEPARTEMENT | METRES_CARRES |
|---|------------|-------------|---------------|
| ----- | ----- | ----- | ----- |
| 6 BD SUCHET, 75016 PARIS 16 | 9000000.00 | PARIS | 10 |
| 16 CHE DE LA CAVIGNON, 91100 CORBEIL ESSONNES | 8600000.00 | ESSONNE | 62 |
| 104 RUE DU BAC, 75007 PARIS 07 | 8577713.00 | PARIS | 289 |
| 33 RUE LEMERCIER, 75017 PARIS 17 | 7620000.00 | PARIS | 42 |
| 72 RUE D ASSAS, 75006 PARIS 06 | 7600000.00 | PARIS | 200 |
| 8 RUE SAINT HYACINTHE, 75001 PARIS 01 | 7535000.00 | PARIS | 143 |
| 36 AV GEORGES MANDEL, 75016 PARIS 16 | 7420000.00 | PARIS | 357 |
| 23 BD DE BEAUSEJOUR, 75016 PARIS 16 | 7200000.00 | PARIS | 241 |
| 26 RUE CAMBON, 75001 PARIS 01 | 7050000.00 | PARIS | 310 |
| 108 RUE SAINT HONORE, 75001 PARIS 01 | 6600000.00 | PARIS | 76 |

6. Taux d'évolution du nombre de ventes entre le premier et le deuxième trimestres de 2020.

```
SELECT CONCAT(CAST(ROUND((((sem2-sem1)/sem1)*100), 2) AS DECIMAL (5,2)), '%') AS
taux_evol_ventes_sem1_sem2 FROM
(
SELECT COUNT(*) AS sem1
FROM Mutation
WHERE date<'2020-04-01 00:00:00'
),
(
SELECT COUNT(*) AS sem2
FROM Mutation
WHERE date>='2020-04-01 00:00:00'
);
```

TAUX_EVOL_VENTES_SEM1_SEM2

3.68%

7. Liste des communes où le taux d'évolution des ventes est supérieur à 20 % entre le premier et le second semestres de 2020.

```
SELECT CONCAT(CAST(ROUND((((sem2-sem1)/sem1)*100, 2) AS DECIMAL(7,2)), '%') AS
taux_evol_ventes, Commune.nom AS commune
FROM Commune
LEFT JOIN
(
SELECT COUNT(*) AS sem1, Commune.nom
FROM Mutation
JOIN Objet ON Mutation.id_objet = Objet.id
JOIN Adresse ON Objet.id_adresse=Adresse.id
JOIN Commune ON Adresse.id_commune=Commune.id
```

```

WHERE date<'2020-04-01 00:00:00'
GROUP BY Commune.nom
) AS Sem1
ON Sem1.nom=Commune.nom
LEFT JOIN
(
SELECT COUNT(*) AS sem2, Commune.nom
FROM Mutation
JOIN Objet ON Mutation.id_objet = Objet.id
JOIN Adresse ON Objet.id_adresse=Adresse.id
JOIN Commune ON Adresse.id_commune=Commune.id
WHERE date>='2020-04-01 00:00:00'
GROUP BY Commune.nom
) AS Sem2
ON Sem2.nom=Commune.nom
WHERE ((sem2-sem1)/sem1)*100 > 20;

```

| TAUX_EVOL_VENTES | COMMUNE |
|------------------|--------------------------|
| 350.00% | ABBEVILLE |
| 160.00% | ABLON-SUR-SEINE |
| 104.55% | AGDE |
| 83.33% | AIGUES-MORTES |
| 400.00% | AIRE-SUR-L'ADOUR |
| 100.00% | ALENCON |
| 100.00% | AMPUIS |
| 100.00% | ANCENIS-SAINT-GEREON |
| 33.33% | ANDRESY |
| 100.00% | ANGLET |
| 50.00% | ANNECY |
| 100.00% | ANNEMASSE |
| 250.00% | APT |
| 137.50% | ARCUEIL |
| 33.33% | ARDON |
| 68.97% | ARGENTEUIL |
| 125.00% | ARMENTIERES |
| 100.00% | ARNAS |
| 122.22% | ARPAJON |
| 200.00% | AUBERGENVILLE |
| 48.00% | AUBERVILLIERS |
| 50.00% | AUCAMVILLE |
| 200.00% | AUCH |
| 33.33% | AULT |
| 33.33% | AUTUN |
| 77.78% | AUXERRE |
| 155.56% | AVIGNON |
| 200.00% | AVRANCHES |
| 100.00% | AYTRE |
| 100.00% | BALLAN MIRE |
| 200.00% | BALMA |
| 150.00% | BARCELONNETTE |
| 100.00% | BARRE-DE-MONTS (LA) |
| 100.00% | BARSAC |
| 150.00% | BASSENS |
| 150.00% | BASSENS |
| 25.00% | BATZ-SUR-MER |
| 77.78% | BEAUMONT-SUR-OISE |
| 100.00% | BEAUPREAU-EN-MAUGES |
| 84.62% | BEAUVAIS |
| 100.00% | BEDOIN |
| 500.00% | BELLEVILLE-EN-BEAUJOLAIS |
| 33.33% | BERCK |
| 200.00% | BETHENY |
| 100.00% | BEUIL |
| 225.00% | BEZIERS |
| 125.00% | BEZONS |
| 100.00% | BLAIN |
| 100.00% | BLANQUEFORT |
| 100.00% | BLAYE |

| | |
|----------|----------------------------|
| 100.00% | BLOIS |
| 200.00% | BOIS GUILLAUME |
| 100.00% | BOISSY-L 'AILLERIE |
| 22.22% | BOISSY-SAINT-LEGER |
| 200.00% | BOLQUERE |
| 100.00% | BONNEUIL-EN-FRANCE |
| 25.00% | BONNEVILLE |
| 69.23% | BORMES-LES-MIMOSAS |
| 50.00% | BOUGUENAI |
| 38.10% | BOURGES |
| 39.29% | BREST |
| 50.00% | BRETIGNOLLES-SUR-MER |
| 72.73% | BRIE COMTE ROBERT |
| 66.67% | BRIVE LA GAILLARDE |
| 28.57% | BRON |
| 50.00% | BRUGES |
| 50.00% | BRUNOY |
| 45.45% | BRY-SUR-MARNE |
| 25.00% | CADAUJAC |
| 350.00% | CALAIS |
| 83.33% | CALUIRE ET CUIRE |
| 200.00% | CANCALE |
| 100.00% | CANEJAN |
| 45.45% | CARCASSONNE |
| 100.00% | CARPENTRAS |
| 60.00% | CARQUEFOU |
| 33.33% | CASTELGINEST |
| 200.00% | CASTELNAU LE LEZ |
| 200.00% | CASTELNAUDARY |
| 100.00% | CASTRIES |
| 100.00% | CAUTERETS |
| 1600.00% | CAVAILLON |
| 300.00% | CAVALAIRE-SUR-MER |
| 33.33% | CAYEUX-SUR-MER |
| 177.78% | CENON |
| 60.00% | CERGY |
| 766.67% | CHALON-SUR-SAONE |
| 68.18% | CHALONS EN CHAMPAGNE |
| 50.00% | CHAMBERY |
| 100.00% | CHAMBRAY LES TOURS |
| 25.00% | CHAMONIX MONT BLANC |
| 100.00% | CHAMPAGNOLE |
| 100.00% | CHAMPCUEIL |
| 108.70% | CHAMPIGNY-SUR-MARNE |
| 175.00% | CHAMROUSSE |
| 50.00% | CHANTELOUP EN BRIE |
| 300.00% | CHANTELOUP-LES-VIGNES |
| 50.00% | CHANTILLY |
| 100.00% | CHANTONNAY |
| 50.00% | CHANTRAINE |
| 400.00% | CHAPELLE-SUR-ERDRE (LA) |
| 100.00% | CHARBONNIERES-LES-BAINS |
| 100.00% | CHARLEVILLE-MEZIERES |
| 45.45% | CHARTRES |
| 66.67% | CHARTRES-DE-BRETAGNE |
| 100.00% | CHASSIEU |
| 100.00% | CHATEAU-ARNOUX-SAINT-AUBAN |
| 200.00% | CHATEAUBRIANT |
| 200.00% | CHATEAUDUN |
| 150.00% | CHATEAUNEUF S LOIRE |
| 400.00% | CHAUMONT |
| 153.33% | CHELLES |
| 122.22% | CHENNEVIERES SUR MARNE |
| 88.89% | CHERBOURG-EN-COTENTIN |
| 50.00% | CHEVREUSE |
| 54.55% | CHILLY MAZARIN |
| 40.00% | CHOLET |
| 100.00% | CLAIX |
| 100.00% | CLARENSAC |

| | |
|---------|-------------------------|
| 50.00% | CLAYE-SOUILLY |
| 75.00% | CLERMONT L HERAULT |
| 47.73% | CLICHY |
| 83.33% | COMBS LA VILLE |
| 61.90% | COMPIEGNE |
| 300.00% | CONCARNEAU |
| 150.00% | CONDRIEU |
| 100.00% | CORBAS |
| 30.43% | CORBEIL ESSONNES |
| 100.00% | CORBREUSE |
| 200.00% | CORRENCON-EN-VERCORS |
| 100.00% | COUBERT |
| 200.00% | COUBRON |
| 150.00% | COUZON-AU-MONT-D OR |
| 200.00% | COYE LA FORET |
| 33.33% | CRAPONNE |
| 100.00% | CRECY LA CHAPELLE |
| 200.00% | CREGY-LES-MEAUX |
| 50.00% | CREON |
| 100.00% | CREPY EN VALOIS |
| 300.00% | CREST |
| 128.57% | DAMMARIE LES LYS |
| 28.57% | DAMMARTIN-EN-GOELE |
| 50.00% | DARDILLY |
| 83.33% | DEUIL LA BARRE |
| 228.57% | DINAN |
| 66.67% | DINARD |
| 100.00% | DOL DE BRETAGNE |
| 100.00% | DOMENE |
| 100.00% | DOUBS |
| 200.00% | DOUSSARD |
| 125.00% | DRAGUIGNAN |
| 233.33% | DUCOS |
| 36.36% | EAUBONNE |
| 50.00% | EGLY |
| 53.33% | ELANCOURT |
| 100.00% | EMBRUN |
| 33.33% | EMERAINVILLE |
| 100.00% | ENNERY |
| 100.00% | EPERNON |
| 64.71% | EPINAL |
| 100.00% | ESPALY-SAINT-MARCEL |
| 75.00% | ESSARTS-LE-ROI (LES) |
| 20.83% | ETAMPES |
| 33.33% | ETANG-LA-VILLE (L) |
| 90.91% | EVREUX |
| 200.00% | EYBENS |
| 80.00% | EYSINES |
| 100.00% | FAVERGES-SEYTHENEX |
| 183.33% | FECAMP |
| 100.00% | FENOUILLET |
| 400.00% | FLEURY-MEROGIS |
| 125.00% | FONTAINE |
| 44.44% | FONTENAY-SOUS-BOIS |
| 33.33% | FORT DE FRANCE |
| 33.33% | FRANCHEVILLE |
| 68.18% | FRANCONVILLE LA GARENNE |
| 73.91% | FRESNES |
| 50.00% | FROGES |
| 85.71% | GAGNY |
| 100.00% | GALLARDON |
| 200.00% | GAP |
| 200.00% | GENAS |
| 37.50% | GENTILLY |
| 100.00% | GILETTE |
| 200.00% | GIVET |
| 100.00% | GOURNAY-EN-BRAY |
| 133.33% | GOUSSAINVILLE |
| 300.00% | GRAND QUEVILLY (LE) |

| | |
|----------|--------------------------|
| 100.00% | GRETZ-ARMAINVILLIERS |
| 60.00% | GRIGNY |
| 60.00% | GRIGNY |
| 50.00% | GUERET |
| 100.00% | GUICHEN |
| 50.00% | GUIDEL |
| 100.00% | GUIGNES |
| 100.00% | GUIGNEVILLE |
| 100.00% | GUINGAMP |
| 50.00% | GUJAN MESTRAS |
| 200.00% | HALLUIN |
| 50.00% | HAUBOURDIN |
| 133.33% | HENNEBONT |
| 31.25% | HERBLAY-SUR-SEINE |
| 162.50% | HOUILLES |
| 59.09% | HYERES |
| 300.00% | JANZE |
| 50.00% | JARGEAU |
| 28.57% | JOINVILLE-LE-PONT |
| 1200.00% | L ISLE SUR LA SORGUE |
| 62.50% | L'HAY-LES-ROSES |
| 25.00% | L'ILE-SAINT-DENIS |
| 85.19% | LA BAULE-ESCOUBLAC |
| 100.00% | LA BERNERIE EN RETZ |
| 100.00% | LA BUISSE |
| 80.00% | LA CHAPELLE ST LUC |
| 200.00% | LA CHAUSSEE SAINT VICTOR |
| 40.00% | LA FARLEDE |
| 100.00% | LA FERTE BERNARD |
| 100.00% | LA FERTE SOUS JOUARRE |
| 166.67% | LA GRANDE MOTTE |
| 33.33% | LA MULATIERE |
| 250.00% | LA PLAGNE TARENTEAISE |
| 33.33% | LA ROCHELLE |
| 200.00% | LA SALLE |
| 41.67% | LA SEYNE SUR MER |
| 300.00% | LA TESTE-DE-BUCH |
| 40.00% | LA TURBALLE |
| 200.00% | LA-VOULTE-SUR-RHONE |
| 100.00% | LACROIX FALGARDE |
| 600.00% | LAMBALLE-ARMOR |
| 600.00% | LAMORLAYE |
| 50.00% | LANDIVISIAU |
| 66.67% | LANESTER |
| 200.00% | LANGON |
| 200.00% | LANTON |
| 27.27% | LAON |
| 150.00% | LARMOR-PLAGE |
| 77.78% | LAVAL |
| 125.00% | LE BOURGET |
| 160.00% | LE BOUSCAT |
| 21.43% | LE CHESNAY-ROCQUENCOURT |
| 400.00% | LE CREUSOT |
| 66.67% | LE CROISIC |
| 1000.00% | LE DEVOLUY |
| 56.76% | LE GRAU DU ROI |
| 69.05% | LE HAVRE |
| 33.33% | LE LAMENTIN |
| 66.67% | LE MANS |
| 400.00% | LE PALAIS |
| 50.00% | LE PASSAGE |
| 36.36% | LE PERREUX-SUR-MARNE |
| 200.00% | LE PIN |
| 400.00% | LE PLESSIS BELLEVILLE |
| 300.00% | LE PLESSIS PATE |
| 41.67% | LE PLESSIS-TREVISE |
| 100.00% | LE PONTET |
| 225.00% | LE PRADET |
| 100.00% | LE PUY EN VELAY |

| | |
|---------|------------------------|
| 60.00% | LE TEICH |
| 150.00% | LE TOUQUET PARIS PLAGE |
| 66.67% | LE VERDON SUR MER |
| 40.00% | LECCI |
| 100.00% | LEOGNAN |
| 100.00% | LEON |
| 50.00% | LES ALLUES |
| 100.00% | LES GETS |
| 400.00% | LES HOUCHES |
| 71.43% | LES ULIS |
| 42.86% | LESIGNY |
| 100.00% | LESPARRE-MEDOC |
| 20.69% | LEUCATE |
| 49.15% | LEVALLOIS-PERRET |
| 300.00% | LEVENS |
| 300.00% | LEZIGNAN-CORBIERES |
| 100.00% | LIANCOURT |
| 140.00% | LIBOURNE |
| 71.43% | LIEUSAIN |
| 43.28% | LILLE |
| 100.00% | LILLEBONNE |
| 33.33% | LIMAY |
| 28.57% | LIMEIL-BREVANNES |
| 40.00% | LINAS |
| 100.00% | LISSES |
| 37.50% | LOGNES |
| 33.33% | LONGJUMEAU |
| 25.00% | LONGPONT-SUR-ORGE |
| 600.00% | LONS |
| 200.00% | LORGUES |
| 181.25% | LORIENT |
| 50.00% | LOUVECIENNES |
| 200.00% | LOUVRES |
| 700.00% | LUCE |
| 35.29% | LYON 1ER |
| 30.00% | LYON 2EME |
| 609.09% | LYON 3EME |
| 58.33% | LYON 5EME |
| 200.00% | LYON 6EME |
| 800.00% | LYON 7EME |
| 960.00% | LYON 8EME |
| 38.46% | LYON 9EME |
| 600.00% | MACON |
| 150.00% | MAGNY-LES-HAMEAUX |
| 29.55% | MAISONS-ALFORT |
| 33.33% | MANDRES-LES-ROSES |
| 133.33% | MANIGOD |
| 90.00% | MANTES-LA-JOLIE |
| 100.00% | MARCILLY-D AZERGUES |
| 50.00% | MARCQ EN BAROEUL |
| 100.00% | MARCY-L ETOILE |
| 33.33% | MAREIL-MARLY |
| 50.00% | MARGNY LES COMPIEGNE |
| 100.00% | MARIN |
| 100.00% | MARMANDE |
| 50.00% | MARSEILLAN |
| 100.00% | MARSILLARGUES |
| 100.00% | MARTIGNAS SUR JALLE |
| 100.00% | MATOURY |
| 33.33% | MAUGUIO |
| 109.09% | MAUREPAS |
| 100.00% | MAYENNE |
| 46.88% | MEAUX |
| 40.00% | MEGEVE |
| 95.00% | MELUN |
| 250.00% | MENDE |
| 27.50% | MENTON |
| 50.00% | MERIEL |
| 33.33% | MERS-LES-BAINS |

| | |
|----------|-------------------------|
| 25.00% | MERY-SUR-OISE |
| 100.00% | MESNIL-ESNARD (LE) |
| 333.33% | MEYZIEU |
| 50.00% | MEZIERES-SUR-SEINE |
| 100.00% | MILHAUD |
| 50.00% | MIMIZAN |
| 100.00% | MINIAC-MORVAN |
| 100.00% | MITRY MORY |
| 100.00% | MOISSY-CRAMAYEL |
| 100.00% | MONFLANQUIN |
| 100.00% | MONNETIER-MORNEX |
| 100.00% | MONT SAINT MARTIN |
| 175.00% | MONT-SAINT-AIGNAN |
| 200.00% | MONTAIGU-VENDEE |
| 166.67% | MONTARGIS |
| 100.00% | MONTATAIRE |
| 375.00% | MONTELMAR |
| 42.86% | MONTESSON |
| 200.00% | MONTEUX |
| 100.00% | MONTIGNY EN GOHELLE |
| 75.00% | MONTLHERY |
| 30.00% | MONTMAGNY |
| 42.86% | MONTMORENCY |
| 100.00% | MORDELLES |
| 1000.00% | MORLAIX |
| 50.00% | MORTEAU |
| 200.00% | MUREAUX (LES) |
| 100.00% | NANCY |
| 33.33% | NANDY |
| 51.26% | NANTES |
| 100.00% | NANTEUIL LE HAUDOUIN |
| 136.00% | NARBONNE |
| 100.00% | NEUFCHATEAU |
| 61.70% | NEUILLY-SUR-SEINE |
| 27.17% | NICE |
| 33.33% | NIMES |
| 180.00% | NIORT |
| 25.00% | NOGENT SUR OISE |
| 400.00% | NOGENT-LE-ROI |
| 37.14% | NOGENT-SUR-MARNE |
| 40.00% | NOISIEL |
| 33.33% | NOISY LE ROI |
| 85.71% | NOISY-LE-GRAND |
| 600.00% | ORANGE |
| 400.00% | ORCIERES |
| 66.67% | ORGEVAL |
| 22.22% | ORLY |
| 220.00% | OULLINS |
| 100.00% | PAILLET |
| 100.00% | PAIMBOEUF |
| 50.00% | PAIMPOL |
| 50.00% | PALAVAS-LES-FLOTS |
| 100.00% | PARAY LE MONIAL |
| 32.35% | PARIS 01 |
| 24.19% | PARIS 08 |
| 42.20% | PARIS 10 |
| 26.63% | PARIS 11 |
| 30.91% | PARIS 12 |
| 38.79% | PARIS 16 |
| 46.89% | PARIS 18 |
| 30.17% | PARIS 19 |
| 38.58% | PARIS 20 |
| 100.00% | PARTHENAY |
| 2500.00% | PAU |
| 45.45% | PECQ (LE) |
| 100.00% | PELUSSIN |
| 300.00% | PERENCHIES |
| 50.00% | PERPIGNAN |
| 600.00% | PERRAY-EN-YVELINES (LE) |

| | |
|---------|---------------------------|
| 80.00% | PERROS-GUIREC |
| 33.33% | PERSAN |
| 200.00% | PERTUIS |
| 166.67% | PETIT QUEVILLY (LE) |
| 50.00% | PHALEMPIN |
| 400.00% | PIERRE BENITE |
| 300.00% | PIERRELATTE |
| 100.00% | PITHIVIERS |
| 300.00% | PLERIN |
| 100.00% | PLESSIS-BOUCHARD (LE) |
| 41.18% | POISSY |
| 400.00% | PONT ST ESPRIT |
| 150.00% | PONTARLIER |
| 66.67% | PONTAULT COMBAULT |
| 66.67% | PONTIVY |
| 25.00% | PONTOISE |
| 50.00% | PORT-LOUIS |
| 100.00% | POUSSAN |
| 33.33% | PRINGY |
| 200.00% | PUGET-SUR-ARGENS |
| 50.00% | PUSSAY |
| 55.56% | QUIBERON |
| 150.00% | QUIMPERLE |
| 50.00% | QUINCIEUX |
| 200.00% | RAISMES |
| 73.33% | RAMBOUILLET |
| 200.00% | REAU |
| 240.63% | REIMS |
| 24.59% | RENNES |
| 600.00% | RETHEL |
| 108.33% | REZE |
| 100.00% | RISOUL |
| 50.00% | RIVES-EN-SEINE |
| 71.43% | ROANNE |
| 37.50% | ROCHE SUR YON (LA) |
| 100.00% | ROCHEFORT |
| 72.73% | ROMANS-SUR-ISERE |
| 200.00% | ROMORANTIN-LANTHENAY |
| 800.00% | RONCHIN |
| 52.38% | ROSNY-SOUS-BOIS |
| 100.00% | ROUBAIX |
| 716.67% | ROUEN |
| 100.00% | ROUFFIAC TOLOSAN |
| 200.00% | RUELLE-SUR-TOUVRE |
| 100.00% | RUPT-SUR-MOSELLE |
| 50.00% | SABLE SUR SARTHE |
| 100.00% | SAIN-BEL |
| 150.00% | SAINT BREVIN LES PINS |
| 200.00% | SAINT CYR AU MONT D OR |
| 400.00% | SAINT CYR SUR LOIRE |
| 50.00% | SAINT DENIS |
| 150.00% | SAINT DIE DES VOSGES |
| 200.00% | SAINT LAURENT MEDOC |
| 83.33% | SAINT MAX |
| 100.00% | SAINT MEDARD EN JALLES |
| 33.33% | SAINT THIBAUT DES VIGNES |
| 350.00% | SAINT-ANDRE-DE-CUBZAC |
| 100.00% | SAINT-ANDRE-DES-EAUX |
| 66.67% | SAINT-BRICE-SOUS-FORET |
| 138.89% | SAINT-BRIEUC |
| 44.12% | SAINT-DENIS |
| 75.00% | SAINT-EGREVE |
| 67.39% | SAINT-ETIENNE |
| 33.33% | SAINT-ETIENNE-DU-ROUVRAY |
| 25.00% | SAINT-GENIS-LAVAL |
| 40.00% | SAINT-GILLES-CROIX-DE-VIE |
| 200.00% | SAINT-JEAN-LE-BLANC |
| 150.00% | SAINT-LARY-SOULAN |
| 32.26% | SAINT-MALO |

| | |
|---------|---------------------------|
| 37.93% | SAINT-MANDE |
| 100.00% | SAINT-MARTIN-DE-BROMES |
| 300.00% | SAINT-MARTIN-LE-VINOUX |
| 200.00% | SAINT-MARTIN-VESUBIE |
| 100.00% | SAINT-MEMMIE |
| 46.15% | SAINT-MICHEL-SUR-ORGE |
| 50.00% | SAINT-NAZAIRE |
| 50.00% | SAINT-NAZAIRE |
| 100.00% | SAINT-NOM-LA-BRETECHE |
| 100.00% | SAINT-PATHUS |
| 66.67% | SAINT-PAUL |
| 100.00% | SAINT-PAUL-TROIS-CHATEAUX |
| 100.00% | SAINT-PHILIBERT |
| 100.00% | SAINT-PIERRE-DES-CORPS |
| 83.33% | SAINT-PRIEST |
| 50.00% | SAINT-PRIX |
| 100.00% | SAINT-PRYVE-SAINT-MESMIN |
| 200.00% | SAINT-QUAY-PORTRIEUX |
| 200.00% | SAINTE LUCE |
| 125.00% | SAINTE MAXIME |
| 100.00% | SAINTE PAZANNE |
| 42.86% | SAINTE-GENEVIEVE-DES-BOIS |
| 150.00% | SAINTE-LUCE-SUR-LOIRE |
| 100.00% | SAMOIS SUR SEINE |
| 75.00% | SANNOIS |
| 100.00% | SARAN |
| 26.67% | SARCELLES |
| 200.00% | SARRIANS |
| 33.33% | SASSENAGE |
| 50.00% | SATHONAY-CAMP |
| 100.00% | SAULX-LES-CHARTREUX |
| 42.86% | SAUMUR |
| 50.00% | SAVIGNY-LE-TEMPLE |
| 100.00% | SECLIN |
| 50.00% | SEDAN |
| 200.00% | SENS |
| 200.00% | SERIGNAN |
| 25.00% | SOUSTONS |
| 266.67% | ST FONS |
| 77.78% | ST GRATIEN |
| 200.00% | ST ORENS DE GAMEVILLE |
| 40.00% | ST SEBASTIEN SUR LOIRE |
| 90.91% | ST-HERBLAIN |
| 250.00% | TANINGES |
| 75.00% | TARARE |
| 35.71% | TASSIN-LA-DEMI-LUNE |
| 133.33% | THIAIS |
| 100.00% | THYEZ |
| 200.00% | TIGERY |
| 166.67% | TINQUEUX |
| 200.00% | TOUL |
| 108.47% | TOULON |
| 41.03% | TOULOUSE |
| 81.82% | TOURCOING |
| 100.00% | TOURNEFEUILLE |
| 47.06% | TOURS |
| 42.86% | TRANCHE-SUR-MER (LA) |
| 200.00% | TREILLIERES |
| 100.00% | TRESSES |
| 33.33% | TROIS ILETS |
| 73.53% | TROYES |
| 50.00% | TULLINS |
| 85.71% | UZES |
| 50.00% | VAISON-LA-ROMAINE |
| 25.00% | VAL DE BRIEY |
| 100.00% | VAL-D ISERE |
| 100.00% | VALBONNE |
| 25.00% | VALENCE |
| 275.00% | VALENCIENNES |

| | |
|---------|----------------------|
| 200.00% | VALMEINIER |
| 80.00% | VALRAS-PLAGE |
| 33.33% | VALS-LES-BAINS |
| 37.50% | VANDOEUVRE LES NANCY |
| 66.67% | VAULX EN VELIN |
| 100.00% | VAUX-LE-PENIL |
| 125.00% | VENISSIEUX |
| 400.00% | VERNON |
| 28.57% | VERNOUILLET |
| 28.57% | VERNOUILLET |
| 100.00% | VERRIERES-EN-ANJOU |
| 500.00% | VETRAZ-MONTHOUX |
| 100.00% | VIAS |
| 150.00% | VILLARD-BONNOT |
| 70.37% | VILLEFRANCHE |
| 26.67% | VILLEMOMBLE |
| 400.00% | VILLENEUVE SUR LOT |
| 200.00% | VILLENNES-SUR-SEINE |
| 400.00% | VILLENOL |
| 66.67% | VILLERS-COTTERETS |
| 100.00% | VILLETANEUSE |
| 144.83% | VILLEURBANNE |
| 66.67% | VILLIERS-LE-BEL |
| 33.33% | VILLIERS-SUR-MARNE |
| 100.00% | VINAY |
| 100.00% | VINAY |
| 100.00% | VINEUIL ST FIRMIN |
| 300.00% | VITRE |
| 36.67% | VITRY-SUR-SEINE |
| 133.33% | VOIRON |
| 400.00% | VOREPPE |
| 200.00% | WITRY-LES-REIMS |
| 60.00% | YVETOT |
| 50.00% | ZONZA |

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

```
SELECT CONCAT(CAST(ROUND(((average2/average3)-1)*100, 2) AS DECIMAL(5,2)), '%') AS
dif_prix_metre_carre_app_2pieces_et_3pieces FROM
(
  SELECT AVG(Mutation.valeur_fonciere/Objet.surface_bati) AS average2
  FROM Mutation
  JOIN Objet ON Mutation.id_objet = Objet.id
  WHERE Objet.type_local='Appartement' AND Objet.nombre_pieces = 2
),
(
  SELECT AVG(Mutation.valeur_fonciere/Objet.surface_bati) AS average3
  FROM Mutation
  JOIN Objet ON Mutation.id_objet = Objet.id
  WHERE Objet.type_local='Appartement' AND Objet.nombre_pieces = 3
);
```

DIF_PRIX_METRE_CARRE_APP_2PIECES_ET_3PIECES

15.11%

9. Taux d'appartements qui ont été vendus à un prix du mètre carré deux fois plus élevé que le prix du mètre carré moyen du département.

```
SELECT CONCAT(CAST(ROUND(prix_deux_fois_ou_plus_eleve/tous_app*100, 2) AS DECIMAL (5,2)),
'%') AS taux_appart_prix_eleves FROM
(
  SELECT COUNT(*) AS tous_app
  FROM Mutation
  JOIN Objet ON Mutation.id_objet = Objet.id
  WHERE Objet.type_local = 'Appartement'
),
(
```

```

SELECT COUNT(*) AS prix_deux_fois_ou_plus_eleve
FROM Mutation
JOIN Objet ON Mutation.id_objet = Objet.id
JOIN Adresse ON Objet.id_adresse=Adresse.id
JOIN Commune ON Adresse.id_commune=Commune.id
JOIN Departement ON Commune.code_departement = Departement.code
LEFT JOIN
(
    SELECT AVG(Mutation.valeur_fonciere/Objet.surface_bati) AS prix,
Departement.nom AS nom_dep
FROM Mutation
JOIN Objet ON Mutation.id_objet = Objet.id
JOIN Adresse ON Objet.id_adresse=Adresse.id
JOIN Commune ON Adresse.id_commune=Commune.id
JOIN Departement ON Commune.code_departement = Departement.code
WHERE Objet.type_local = 'Appartement'
GROUP BY Departement.nom
) AS Prix
ON Prix.nom_dep = Departement.nom
WHERE Objet.type_local = 'Appartement' AND Prix.prix/(Mutation.valeur_fonciere/-
Objet.surface_bati) >= 2
);

```

TAUX_APPART_PRIX_ELEVES

8.45%

10. Donnez les moyennes de valeurs foncières pour le top 20 des communes.

```

SELECT Commune.nom AS commune, CAST(ROUND(AVG(Mutation.valeur_fonciere), 2) AS
DECIMAL(12,2)) AS valeur_moyenne FROM Mutation
JOIN Objet ON Mutation.id_objet = Objet.id
JOIN Adresse ON Objet.id_adresse=Adresse.id
JOIN Commune ON Adresse.id_commune=Commune.id
GROUP BY Commune.nom
ORDER BY valeur_moyenne DESC LIMIT 20;

```

| COMMUNE | VALEUR_MOYENNE |
|--------------------------|----------------|
| ----- | ----- |
| GARRIGUES SAINTE EULALIE | 1683000.00 |
| LES PORTES-EN-RE | 1400000.00 |
| VERNEUIL EN HALATTE | 1280000.00 |
| PARIS 07 | 1251288.40 |
| PARIS 16 | 1028243.69 |
| PARIS 01 | 1013503.91 |
| PARIS 08 | 1010536.07 |
| PARIS 06 | 1005955.57 |
| SAINT-JEAN-CAP-FERRAT | 968750.00 |
| VAL-D ISERE | 880000.00 |
| NEUILLY-SUR-SEINE | 813661.07 |
| PARIS 17 | 720622.90 |
| BARBIZON | 713500.00 |
| PARIS 03 | 655953.78 |
| EZE | 655000.00 |
| PARIS 04 | 650908.76 |
| RAMATUELLE | 633000.00 |
| CRESPIERES | 632065.20 |
| GARCHES | 615348.57 |
| DUINGT | 610800.00 |