Exercice 1

1.
```sql
SELECT nom FROM commune
WHERE population_2010> 10000
AND num_departement='29'
```

2.
```sql
SELECT nom FROM commune
WHERE population_2010-population_1999<-1000
AND num_departement='29'
```

3. La commande renvoie la liste des noms des villes de France, sans doublon. On constate qu'il y a strictement moins d'entrées que dans la table commune, donc certaines villes ont le même nom.

4.
```sql
SELECT DISTINCT num_departement
FROM commune
WHERE population_2010>100000
```

Exercice 2

1.
```sql
SELECT AVG(population_2010) FROM commune
WHERE num_departement='29'
```

2.
```sql
SELECT COUNT(nom)
FROM commune
WHERE population_2010>10000
AND (num_departement='22' OR num_departement='29'
OR num_departement='35' OR num_departement='56')
```

Exercice 3

1.
```sql
SELECT COUNT(nom),nom FROM commune
GROUP BY nom
ORDER BY COUNT(nom) DESC
```

2.
```sql
SELECT nom,max(population_2010),num_departement
FROM commune
GROUP BY num_departement
```

Exercice 4

1.
```sql
SELECT commune.nom Communes, departement.nom Département
FROM commune
JOIN departement
ON commune.num_departement=departement.num_departement
```

2.
```sql
SELECT commune.nom Communes, departement.nom Département,
region.nom Région FROM commune
JOIN departement ON
commune.num_departement=departement.num_departement
JOIN region ON departement.num_region=region.num_region
ORDER BY Région
```

3.
```sql
SELECT region.nom, SUM(population_2010)
FROM region
JOIN departement ON departement.num_region=region.num_region
JOIN commune
ON departement.num_departement=commune.num_departement
GROUP BY region.nom
```

4.
```sql
SELECT region.nom FROM region
JOIN departement ON departement.num_region=region.num_region
JOIN commune
ON departement.num_departement=commune.num_departement
GROUP BY region.nom
HAVING SUM(population_2010)<sum(population_1999)
```

Exercice 5
1.
```sql
SELECT nom,population_2010 FROM commune
WHERE population_2010>
      (SELECT AVG(population_2010) FROM commune)
```

2.
```sql
SELECT MAX(S),R,N
FROM
      (
      SELECT SUM(population_2010) S, region.num_region R,
      region.nom N
      FROM commune
      JOIN departement
      ON departement.num_departement=commune.num_departement
      JOIN region ON departement.num_region=region.num_region
      GROUP BY region.num_region
      )
```

Questions supplémentaires
1.
```sql
SELECT DISTINCT nom FROM commune
ORDER BY nom
```

2.
```sql
SELECT COUNT(nom) FROM commune
WHERE population_2010 >100000
```

3.
(a)
```sql
SELECT nom, num_departement, MAX(population_2010)
FROM commune
GROUP BY num_departement
```
(b)
```sql
SELECT C.nom, D.nom, MAX(C.population_2010)
FROM commune C
JOIN departement D ON C.num_departement = D.num_departement
GROUP BY D.num_departement
```
(c)
```sql
SELECT C.nom, D.nom, R.nom, MAX(C.population_2010)
FROM commune C
JOIN departement D ON C.num_departement = D.num_departement
JOIN region R ON R.num_region = D.num_region
GROUP BY D.num_departement
ORDER BY MAX(C.population_2010) DESC
```

4.
(a)
```sql
SELECT DISTINCT D.num_departement from departement D
JOIN commune C ON C.num_departement = D.num_departement
WHERE C.population_2010>200000
```

(b)
```sql
SELECT DISTINCT D.nom from departement D
JOIN commune C ON C.num_departement = D.num_departement
WHERE C.population_2010>200000
```
5.
```sql
SELECT nom
FROM commune
WHERE surface >=
      (SELECT surface
       FROM commune
       WHERE nom="
ORDER BY nom
```