

**Mines Ponts 2016****Question 1**

Clés primaires pour palu : (nom, année); (iso, année).

**Question 2**

```
SELECT * FROM palu
WHERE annee = 2010 AND deces >= 1000;
```

**Question 3**

```
SELECT nom, cas*100000/pop
FROM palu
JOIN demographie
ON palu.iso=demographie.pays
WHERE annee = 2011 AND periode = 2011;
```

```
SELECT nom, cas*100000/pop
FROM palu
JOIN demographie
ON palu.iso=demographie.pays
AND palu.annee=demographie.periode
WHERE annee = 2011;
```

**Question 4**

```
SELECT nom, cas
FROM palu
WHERE annee = 2010
ORDER BY cas DESC
LIMIT 1 OFFSET 1;
```

```
SELECT nom, MAX(cas)
FROM palu
WHERE annee = 2010 AND cas != (
    SELECT MAX(cas)
    FROM palu
    WHERE annee = 2010
```

```
ORDER BY cas DESC)
ORDER BY cas DESC;
```

```
SELECT nom, MAX(cas)
FROM palu
WHERE annee = 2010 AND cas != (
    SELECT MAX(cas)
    FROM palu
    WHERE annee = 2010);
```

**Question 5**

```
sorted(deces2010, key=lambda col: col[1])
```

**Centrale Supélec 2018****Question 1**

```
SELECT SI_DIM, COUNT(*)
FROM SIMULATION
GROUP BY SI_DIM;
```

**Question 2**

```
SELECT SI_NUM, COUNT(*), AVG(RE_VIT)
FROM REBOND
GROUP BY SI_NUM;
```

**Question 3**

```
SELECT RE_DIR, (2*PA_M*RE_VP)
FROM PARTICULE AS PART
JOIN REBOND AS REB
ON PART.PA_NUM = REB.PA_NUM
WHERE SIMU.SI_NUM = n
GROUP BY RE_NUM
```