## SQL Class exercises. Queries from july 2018 exam.

Given the following relations of a database that stores information related to online newspaper articles:
author(<u>aid</u>, name, section)
newspaper(<u>nwid</u>, name, url)
article(<u>naid</u>, headline, summary, nwid, aid, pdate, numHits)

Write the following queries with SQL sentences:

a. List the name of the authors whose articles were published on 01/06/2018 and have reached at least 1000 hits. The query also must show the name of the newspaper in which the articles were published. Show only different values.

## SQL Class exercises. Queries from july 2018 exam.

Given the following relations of a database that stores information related to online newspaper articles:

```
author(aid, name, section)
newspaper(nwid, name, url)
article(naid, headline, summary, nwid, aid, pdate, numHits)
```

Write the following queries with SQL sentences:

a. List the name of the authors whose articles were published on 01/06/2018 and have reached at least 1000 hits. The query also must show the name of the newspaper in which the articles were published. Show only different values.

```
SELECT DISTINCT a.name, p.name
FROM author a
JOIN article n ON a.aid = n.aid
JOIN newspaper p ON n.nwid = p.nwid
WHERE n.pdate = TO_DATE('01/06/2018') AND numHits > 1000;
```

## SQL Class exercises. Queries from july 2018 exam.

Given the following relations of a database that stores information related to online newspaper articles:

```
author(aid, name, section)
newspaper(nwid, name, url)
article(naid, headline, summary, nwid, aid, pdate, numHits)
```

Write the following queries with SQL sentences:

b. Show the name of the authors that have published more than 2 articles on the same day. The result also have to show the number of hits reached by those articles.

# SQL Class exercises. Queries from july 2018 exam.

Given the following relations of a database that stores information related to online newspaper articles:

```
author(aid, name, section)
newspaper(nwid, name, url)
article(naid, headline, summary, nwid, aid, pdate, numHits)
```

Write the following queries with SQL sentences:

b. Show the name of the authors that have published more than 2 articles on the same day. The result also have to show the number of hits reached by those articles.

```sql
SELECT a.name, sum(numHits)
FROM author a
JOIN article n ON a.aid = n.aid
GROUP BY a.aid, a.name, n.pdate -- pdate is only dd-mm-yyyy
HAVING count(*) > 2;
```

## SQL Class exercises. Queries from july 2018 exam.

Given the following relations of a database that stores information related to online newspaper articles:

```
author(aid, name, section)
newspaper(nwid, name, url)
article(naid, headline, summary, nwid, aid, pdate, numHits)
```

Write the following queries with SQL sentences:

c. List the name of all the authors and the name of the newspapers in which they have published their articles. If an author has NOT published any article the query must show 'None' instead of the name of the newspaper.

# SQL Class exercises. Queries from july 2018 exam.

Given the following relations of a database that stores information related to online newspaper articles:

```
author(aid, name, section)
newspaper(nwid, name, url)
article(naid, headline, summary, nwid, aid, pdate, numHits)
```

Write the following queries with SQL sentences:

c. List the name of all the authors and the name of the newspapers in which they have published their articles. If an author has NOT published any article the query must show 'None' instead of the name of the newspaper.

```
SELECT DISTINCT a.name, NVL(p.name,'(None)')
FROM author a
LEFT JOIN (article n JOIN newspaper p ON n.nwid = p.nwid)
ON a.aid = n.aid;
```

## SQL Class exercises. Queries from july 2018 exam.

Given the following relations of a database that stores information related to online newspaper articles:

```
author(aid, name, section)
newspaper(nwid, name, url)
article(naid, headline, summary, nwid, aid, pdate, numHits)
```

Write the following queries with SQL sentences:

d. List the dates on which all the newspapers have published at least one article, the number of articles published on each date and total number of hits reached.

## SQL Class exercises. Queries from july 2018 exam.

Given the following relations of a database that stores information related
to online newspaper articles:

```
author(aid, name, section)
newspaper(nwid, name, url)
article(naid, headline, summary, nwid, aid, pdate, numHits)
```

Write the following queries with SQL sentences:

d. List the dates on which all the newspapers have published at least one
   article, the number of articles published on each date and total
   number of hits reached.

```
SELECT n.pdate, count(*), sum(n.numHits)
FROM article n GROUP BY n.pdate HAVING NOT EXISTS
  (SELECT p.nwid FROM newspaper p WHERE p.nwid NOT IN
     (SELECT p2.nwid FROM newspaper p2
      JOIN article n2 ON p2.nwid = n2.nwid
      WHERE n2.pdate = n.pdate));
```

## SQL Class exercises. Queries from july 2018 exam.

Given the following relations of a database that stores information related to online newspaper articles:

```
author(aid, name, section)
newspaper(nwid, name, url)
article(naid, headline, summary, nwid, aid, pdate, numHits)
```

Write the following queries with SQL sentences:

  d. List the dates on which all the newspapers have published at least one article, the number of articles published on each date and total number of hits reached.

**Alternate solution:**
```
SELECT n.pdate, count(*), sum(n.numHits)
FROM article n GROUP BY n.pdate
HAVING count(distinct nwid) =
    (select count(*) from newspaper);
```

# SQL Class exercises. Queries from july 2018 exam.

Given the following relations of a database that stores information related to online newspaper articles:

```
author(aid, name, section)
newspaper(nwid, name, url)
article(naid, headline, summary, nwid, aid, pdate, numHits)
```

Write the following queries with SQL sentences:

e. Show the name of the authors that have NOT published any article in a newspaper in which has appeared an article signed by 'John Smith'.

# SQL Class exercises. Queries from july 2018 exam.

Given the following relations of a database that stores information related to online newspaper articles:

```
author(aid, name, section)
newspaper(nwid, name, url)
article(naid, headline, summary, nwid, aid, pdate, numHits)
```

Write the following queries with SQL sentences:

e. Show the name of the authors that have NOT published any article in a newspaper in which has appeared an article signed by 'John Smith'.

```sql
SELECT a.name FROM author a WHERE a.aid NOT IN
   (SELECT n.aid FROM article n WHERE n.nwid IN
      (SELECT n2.nwid FROM article n2
       JOIN author a2 ON n2.aid = a2.aid
       WHERE a2.name = 'John Smith'));
```

## SQL Class exercises. Queries from july 2018 exam.

Given the following relations of a database that stores information related to online newspaper articles:

```
author(aid, name, section)
newspaper(nwid, name, url)
article(naid, headline, summary, nwid, aid, pdate, numHits)
```

Write the following queries with SQL sentences:

e. Show the name of the authors that have NOT published any article in a newspaper in which has appeared an article signed by 'John Smith'.

**Alternate solution:**
```
SELECT a.name FROM author a WHERE NOT EXISTS
  (SELECT n.nwid FROM article n WHERE n.aid = a.aid
   INTERSECT
   SELECT n2.nwid FROM article n2
   JOIN author a2 ON n2.aid = a2.aid
   WHERE a2.name = 'John Smith');
```