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Advanced data Technologies

Lab 2

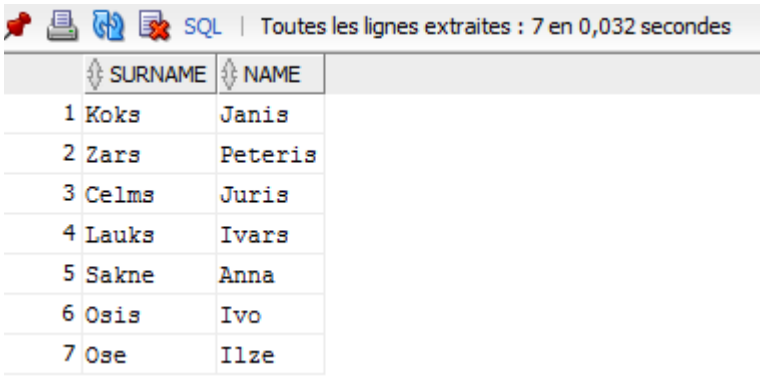
For the following results, output screenshots are made with the French version of the software interface, I hope it will not be a problem.

Query file containing the following queries is ***querry.sql***.

Your task is to write SQL statements that complete the following tasks:

1. (Easy) Retrieve list of students in the form of one field that contains both name and surname in the form “SURNAME, Name”.

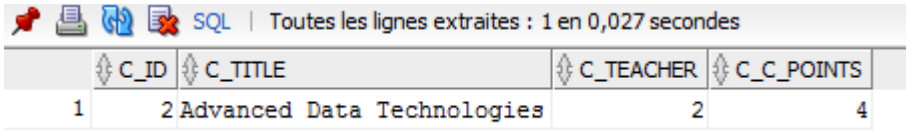
   ```
   select st_surname as SURNAME, st_name as Name
   from students;
   ```



	SURNAME	NAME
1	Koks	Janis
2	Zars	Peteris
3	Celms	Juris
4	Lauks	Ivars
5	Sakne	Anna
6	Osis	Ivo
7	Ose	Ilze

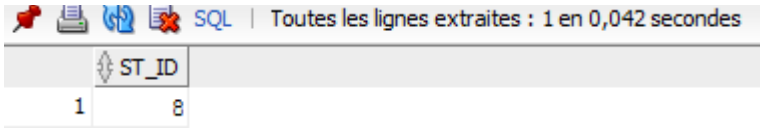
2. (Easy) Find all curses whose names contain word “Data”.

   ```
   select *
   from courses
   where C_title like '%Data%';
   ```



3. (Easy) Retrieve all students that have average mark above 8.

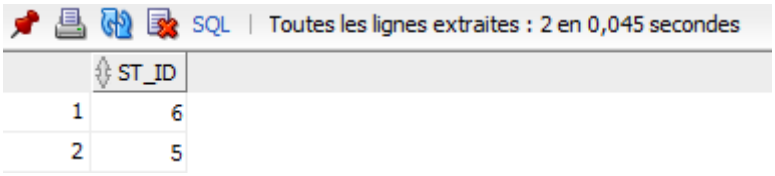
```
select st_id
from students, grades
where st_id=g_student
group by st_id
having avg(g_grade)>8;
```



First join tables then group by student and filter according to the average mark.

4. (Medium) Retrieve all students that have at least one grade below 4.

```
select st_id
from students, grades
where st_id=g_student
group by st_id
having min(g_grade)<4;
```

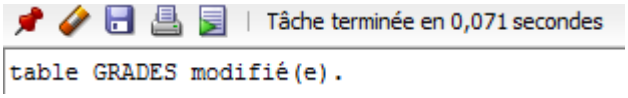


First join tables then group by student and check the grades. If the minimum grade is below 4, the student has at least one grade below 4.

5. (Hard) Add a constraint specifying that the grade must be between 1 and 10.

```
alter table grades
```

add constraint g_grade CHECK ((g_grade >= 1) and (g_grade < 11)) ;



Add a check constraint to this column.

6. (Easy) Drop one table.

   drop table grades;