Exercises SQL DML. Databases. 2016/2017

Let us consider the database *AllTheBooks* and specify the following queries in SQL.

1. List of books, the publication year of each of them and their authors, ordered by publication year.
2. List of books that were published before 01-01-2000.
3. List of clients that have bought at least one book.
4. List of clients that bought the book whose ISBN= 4554672899910.
5. List of clients whose name contains 'Jo' and the books that they have bought.
6. List of clients that have bought at least a book whose price is greater than 10€.
7. List of clients and dates in which they have placed orders that have not been sent yet.
8. List of clients that have not bought books whose price is greater than 10€.
9. List of books whose sale price is greater than 30€ or that were published before 2000.
10. List of clients that have placed more than one order in the same date.
11. List of books and amount of copies of each of them that have been sold.
12. List of clients and the total amount that they have spent in the bookstore.
13. Profits obtained from sales of books.
14. Total amount of each order (ordered by date) that have been placed after 01/12/2011 and have not been sent yet.
15. Orders whose total amount is greater than 100€.
16. Orders and the total amount of each of them that contains more than a book (title).
17. Orders and the total amount of each of them that contains more than 4 copies.
18. List of the most expensive books.
19. List of books that have not been sold or that have been sold but the profit per copy is less than 5€.
20. List of clients that have bought more than one copy of a book sometime.

2. Let us consider the databases *FlyWithOther* and specify the following queries in SQL.

1. List codes and names of pilots that are certified to pilot Boeing aircrafts.
2. List codes of aircrafts that can fly from Los Angeles to Chicago without refuelling.
3. List pilots that have a certificate to pilot aircrafts with a range of 3,000 km. but cannot pilot Boeing aircrafts.
4. List of employees that have the highest salary.
5. List of employees that have the highest number of certificates.
6. List of employees that have at least 3 certificates.
7. List of names of the aircrafts such that all the pilots that can pilot them have a salary greater than 80.000€.
8. For each pilot that can pilot more than 3 aircrafts, show the code of the pilot and the distance that these aircrafts can cover.
9. List the names of the pilots whose salary is less than the cheaper flight from Los Angeles to Honolulu.
10. Show the difference of the average salary of all the employees (pilots included) and the average salary of the pilots.
11. List of the names and salaries of the employees (no pilots) whose salary is greater than the average salary of the pilots.
12. List the names of the pilots that can pilot ONLY aircrafts with a range greater than 1000Km.

Note: Table Employee contains data of both pilots and other workers. Only pilots can have certificates for piloting aircrafts