SQL Basics.

Задача 1: Напишете и тествайте следните заявки :

1. Write a SQL query to display all information about all departments.

2. Write a SQL query to find all department names.

3. Write a SQL query to find the salary of each employee by month, by day and hour. Consider that one month has 20 workdays and each workday has 8 work hours.

4. Write a SQL query to find the email addresses of each employee. Consider that the mail domain is mail.somecompany.com. Emails should look like "bernst@mail.somecompany.com". The produced column should be named "Full Email Address".

5. Write a SQL query to find all different salaries that are paid to the employees. Use DISTINCT.

6. Write a SQL query to find all departments and all region names, country names and city names as a single list. Use UNION.

7. Write a SQL query to find all information about the employees whose position is "AC_MGR" (Accounting Manager).

8. Write a SQL query to find the names of all employees whose first name starts with "Sa". Use LIKE.

9. Write a SQL query to find the names of all employees whose last name contains the character sequence "ei". Use LIKE.

10. Write a SQL query to find the names of all employees whose salary is in the range [3000...5000]. Use BETWEEN.

11. Write a SQL query to find the names of all employees whose salary is in the range [2000...15000] but is not in range [5000 … 10000]. Use MINUS.

12. Write a SQL query to find the names of all employees whose salary is 2500, 4000 or 5000. Use IN.

13. Write a SQL query to find all locations that have no state or post code defined. Use IS NULL.

14. Write a SQL query to find all employees that are paid more than 10 000. Order them in decreasing order by salary. Use ORDER BY.

15. Write a SQL query to find the first 10 employees joined the company (most senior people).

16. Write a SQL query to find all departments and the town of their location. Use NATURAL JOIN.

17. Write a SQL query to find all departments and the town of their location. Use join with USING clause.

18. Write a SQL query to find all departments and the town of their location. Use inner join with ON clause.

19. Modify the last SQL query to include also the name of the manager for each department.

20. Write a SQL query to find all the locations and the departments for each location along with the locations that do not have department. User right outer join.

21. Rewrite the last SQL query to use left outer join.

22. Rewrite the last query to use WHERE instead of JOIN.

23. Write a SQL query to find the manager name of each department.

24. Modify the last SQL query to find also the location of each department manager.

25. Write a SQL query to find the names of all employees from the departments "Sales" and "Finance" whose hire year is between 1995 and 2000.

26. Find all employees that have worked in the past in the department “Sales”. Use complex join condition.

27. Write a SQL query to display all employees (first and last name) along with their corresponding manager (first and last name). Use self-join.

28. Combine all first names with all last names of the employees with a CROSS JOIN.

29. Write a SQL query to display all employees, along with their job title, department, location, country and region. Use multiple joins.

30. Modify the last SQL query to display also the manager name for each employee or "No manager" in case there is no manager.

31. Write a SQL query to find all employees that have worked in the past at job position "AC_ACCOUNT" and at some time later at job position "AC_MGR". Display the employees' names and current job title.

Hint: first self-join JOB_HISTORY table, then apply filtering and finally join the result with EMPLOYEES and JOBS tables.