Requirements and comments for the work:

1. **Where it was asked to explain something with the query, you need to leave your answer near code in comment part!**

2. **Some requirements for specific tasks were written in brackets next to the exercise. Please, follow them! Otherwise, not acceptable or maximum you could obtain half points for the task. Depends on the difficulty of the task.**

3. **The exercises that weigh more points than common are highlighted in red since they are a bit more complicated. Generally, the percentage is in blue. You should cover them. The percent of provided number points was written near each task.**

4. **Prepare your work carefully! Do not forget to provide all necessary comments, screenshots, questions (if they exist) and so on. For lazy report design I DECREASE AMOUNT OF POINTS!**

5. **Prepare you lab works in both sql and pdf formats. Name both files with your surname + name externally as well as internally (in sql just in top, in pdf prepare title).**

6. **Screenshot content should be legible. There is no need to archive the document and put screenshots in the archive. Screenshots are immediately inserted into the document, like a picture.**

7. **Please, submit your work to the Assignment before the deadline!**

8. **If you miss a practice lesson for no good reason, you'll lose points for homework!**
9. **GOOD LUCK!!! 😊**

EMPLOYEES

EMPLOYEE_ID	FULL_NAME	EMAIL	PHONE_NUMBER	HIRE_DAT	JOB_ID	SALARY
100	Steven King	SKING	515.123.4567	17.06.87	AD_PRES	24000
101	Neena Kochhar	NKOCHAR	515.123.4568	21.09.89	AD_VP	17000
102	Lex De Haan	LDEHAA	515.123.4569	13.03.93	AD_VP	17000
103	Alexander Hunold	AHUNOLD	590.423.4567	03.01.90	IT_PROG	9000
104	Bruce Ernst	BENST	590.423.4568	21.05.91	IT_PROG	6000
107	Diana Lorentz	DLORENTZ	590.423.5565	07.02.99	IT_PROG	4000
124	Kevin Mourgos	KNOURGOS	650.123.5234	16.11.99	SH_MAN	5800
141	Trenna Rajs	TRAJS	650.121.8009	17.10.95	SH_CLERK	3500
142	Curtis Davies	CDAVIES	650.121.2996	29.01.97	SH_CLERK	3100
143	Randall Matos	RMATOS	650.121.2874	15.03.98	SH_CLERK	2600
144	Peter Vargas	PVARGAS	650.121.2004	09.07.98	SH_CLERK	2500
149	Eleni Zlotkey	EZLOTKEY	011.44.1344.429010	29.01.00	SA_MAN	7000
174	Ellen Abel	ABELL	011.44.1644.429267	11.05.96	SA_REP	11000
176	Jonathon Taylor	JTAILOR	011.44.1644.429265	24.03.98	SA_REP	8600
178	Kimberely Grant	KGRANT	011.44.1644.429263	24.05.99	SA_REP	7000
200	Jennifer Whalen	JWHALEN	515.123.4444	17.09.87	AD_ASST	4001
201	Michael Hartstein	MHARTSTE	515.123.5555	17.02.96	MK_MAN	13000
202	Pat Fay	PFAY	603.123.6666	17.08.97	MK_REP	6000
205	Shelley Higgins	SHIGGINS	515.123.8080	07.06.94	AC_MGR	12000
206	William Gietz	WGIETZ	515.123.8181	07.06.94	AC_ACCOUNT	8300

DEPARTMENTS

DEPARTMENT_ID	DEPARTMENT_NAME	MANAGER_ID	LOCATION_ID
10	Administration	200	1700
20	Marketing	201	1800
50	Shipping	124	1500
60	IT	103	1400
80	Sales	149	2500
90	Executive	100	1700
110	Accounting	205	1700
190	Contracting		1700

JOB_GRADES

GRA	LOWEST_SAL	HIGHEST_SAL
A	1000	2999
B	3000	5999
C	6000	9999
D	10000	14999
E	15000	24999
F	25000	40000

1. The Human Resources (HR) department needs data including id, full name, hiring date and salaries of all employees. 1%
2. Write a query to display id, full names, email, annual salaries of all employees. 2%
3. The Human Resources (HR) department requests data for all unique jobs from the EMPLOYEES table. Job IDs should not be repeated in the output. 3%
4. Due to funding problems, the HR department needs a report that provides all the information about the programmers whose salaries are over 5000. 3%
5. Generate a report to display the id, full name, and job title of all employees whose salaries range from 4000 to 7000 (including left and right boundaries). (USE BETWEEN!) 3%

6. The HR department needs data on high-paid and low-paid employees. Write a query to display the full name, and salaries of all employees whose salaries are outside the range from 3000 to 9000 (USE BETWEEN!). 3%
7. Write a query to display id, last names, first names, annual salaries of those employees whose annual salaries are below 50000. 3%
8. Write a query to display id, full name, salaries of those employees whose salaries are in the range from 4000 to 7000 (excluding left and right boundaries). Explain the difference between this task and task #5. 3%
9. Write a query to display id, full name, salaries, job title from the list of id «144, 102, 200, 205».
10. Write a query to display id, full name, salaries, job title not from the list of id «144, 102, 200, 205». 3%
11. Write a query to display id, full name, salaries of those employees whose second letter of surname is the letter 'a'. 6%
12. Write a query to display all the names of employees where the third letter of name is 'a'. 3%
13. Write a query to display id, full name, email, salaries of those employees whose FIRST LETTER of NAME + last name = EMAIL of each employee. Example: full_name = Steven King, email = SKING. Here name is Steven → First Letter is S, last name = King. FIRST LETTER of NAME + last name is S + King = SKing = SKING. Consider upper and lower cases to be the same (S = s). 10%
14. Write a query to display id, full name, email, salaries of all employees, sorting their salaries in ascending order then by hire date in descending order. 3%
15. Write a query to display id, full name, salaries of all employees, sorting their id in descending order. 3%
16. Write a query to display the average, maximum, minimum and the sum of all programmers' salaries. 3%
17. Write a query to display the whole employee info whose first figure of phone number if the same as last figure the same phone number. Example: 650.121.2996. Here '6' is the first figure as well as the last one. 6%
18. Write a query to display the number of unique professions. 3%
19. Sum the salaries in the EMPLOYEES table for each job title. 3%
20. Find the average salaries in the EMPLOYEES table for each job title. 3%
21. Find the maximum salaries in the EMPLOYEES table for each job title that exceed 10,000 and sort them in descending order. 3%
22. Find the maximum average salary for each job title. 6%
23. Receive a report for each employee in the following form: "full_name" earns "salary" per month, but wants "triple salary". Name the column Dream Salaries. 3%
24. Write a query to display the full name and the number of letters in the full name of employees (a space counts as one character). 3%
25. Write a query to display only first name from a column full_name. Example: FULL_NAME: 'Steven King'. The output must be 1 column named 'first_name' with the data 'Steven'. 3%
26. Write a query to display the first three letters in the first names of employees. 3%
27. Write a query to display the letters in the full names of employees in reverse order. 3%
28. Replace "en" characters in the full_names of employees with "yu" characters. 3%
29. Convert all letters in the full names of employees to uppercase. 3%
30. Your query and explain it (code comments). The query must be interesting. It is not sufficient just to write easy UPDATE, DROP TABLE, DELETE with no arguments. Apply creativity. 3%