

## Laboratory work #5

Please write SQL queries for following tasks and save as .sql file.

```
create table Employees
(
  EMPLOYEE_ID serial,
  FIRST_NAME varchar(50),
  LAST_NAME varchar(50),
  EMAIL varchar(100),
  PHONE_NUMBER varchar(20),
  HIRE_DATE date,
  JOB_ID varchar(10),
  SALARY int,
  COMMISSION_PCT float,
  MANAGER_ID numeric,
  DEPARTMENT_ID numeric,
  primary key (employee_id)
);
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```
insert into Employees values
(default , 'Steven', 'King' , 'SKING' , '515.123.4567' , '1987-06-17' , 'AD_PRES' , 24000.00 ,
0.00 , 0 , 90 ),
(default , 'Neena', 'Kochhar' , 'NKOCHHAR' , '515.123.4568' , '1987-06-18' , 'AD_VP' ,
17000.00 , 0.00 , 100 , 90),
(default , 'Lex', 'De Haan' , 'LDEHAAN' , '515.123.4569' , '1987-06-19' , 'AD_VP' , 17000.00 ,
0.00 , 100 , 90),
(default , 'Alexander', 'Hunold', 'AHUNOLD' , '590.423.4567' , '1987-06-20' , 'IT_PROG' ,
9000.00 , 0.00 , 102 , 60),
(default , 'Bruce', 'Ernst', 'BERNST', '590.423.4568' , '1987-06-21' , 'IT_PROG' , 6000.00 ,
0.00 , 103 , 60 ),
(default , 'David', 'Austin', 'DAUSTIN' , '590.423.4569' , '1987-06-22' , 'IT_PROG' , 4800.00 ,
0.00 , 103 , 60 ),
(default , 'Valli', 'Pataballa', 'VPATABAL' , '590.423.4560' , '1987-06-23' , 'IT_PROG' ,
4800.00 , 0.00 , 103 , 60),
(default , 'Diana', 'Lorentz' , 'DLORENTZ' , '590.423.5567' , '1987-06-24' , 'IT_PROG' ,
4200.00 , 0.00 , 103 , 60),
(default , 'Nancy', 'Greenberg', 'NGREENBE' , '515.124.4569' , '1987-06-25' , 'FI_MGR' ,
12000.00 , 0.00 , 101 , 100),
(default , 'Daniel', 'Faviet', 'DFAVIET' , '515.124.4169' , '1987-06-26' , 'FI_ACCOUNT' ,
9000.00 , 0.00 , 108 , 100),
(default , 'John', 'Chen' , 'JCHEN' , '515.124.4269' , '1987-06-27' , 'FI_ACCOUNT' ,
8200.00 , 0.00 , 108 , 100),
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(default , 'Ismael' , 'Sciarra' , 'ISCIARRA' , '515.124.4369' , '1987-06-28' , 'FI_ACCOUNT' ,
7700.00 , 0.00 , 108 , 100) ,
(default , 'Jose Manuel' , 'Urman' , 'JMURMAN' , '515.124.4469' , '1987-06-29' ,
'FI_ACCOUNT' , 7800.00 , 0.00 , 108 , 100) ,
(default , 'Luis' , 'Popp' , 'LPOPP' , '515.124.4567' , '1987-06-30' , 'FI_ACCOUNT' , 6900.00
, 0.00 , 108 , 100) ,
(default , 'Karen' , 'Colmenares' , 'KCOLMENA' , '515.127.4566' , '1987-07-06' ,
'PU_CLERK' , 2500.00 , 0.00 , 114 , 30) ,
(default , 'Matthew' , 'Weiss' , 'MWEISS' , '650.123.1234' , '1987-07-07' , 'ST_MAN' ,
8000.00 , 0.00 , 100 , 50) ,
(default , 'Adam' , 'Frapp' , 'AFRIPP' , '650.123.2234' , '1987-07-08' , 'ST_MAN' , 8200.00 ,
0.00 , 100 , 50) ,
(default , 'Payam' , 'Kaufling' , 'PKAUFLIN' , '650.123.3234' , '1987-07-09' , 'ST_MAN' ,
7900.00 , 0.00 , 100 , 50) ,
(default , 'Shanta' , 'Vollman' , 'SVOLLMAN' , '650.123.4234' , '1987-07-10' , 'ST_MAN' ,
6500.00 , 0.00 , 100 , 50) ,
(default , 'Kevin' , 'Mourgos' , 'KMOURGOS' , '650.123.5234' , '1987-07-11' , 'ST_MAN' ,
5800.00 , 0.00 , 100 , 50) ,
(default , 'Britney' , 'Everett' , 'BEVERETT' , '650.501.2876' , '1987-09-18' , 'SH_CLERK' ,
3900.00 , 0.00 , 123 , 50) ,
(default , 'Samuel' , 'McCain' , 'SMCCAIN' , '650.501.3876' , '1987-09-19' , 'SH_CLERK' ,
3200.00 , 0.00 , 123 , 50) ,
(default , 'Michael' , 'Hartstein' , 'MHARTSTE' , '515.123.5555' , '1987-09-26' , 'MK_MAN' ,
13000.00 , 0.00 , 100 , 20) ,
(default , 'Pat' , 'Fay' , 'PFAY' , '603.123.6666' , '1987-09-27' , 'MK_REP' , 6000.00 , 0.00 ,
201 , 20) ,
(default , 'Susan' , 'Mavris' , 'SMAVRIS' , '515.123.7777' , '1987-09-28' , 'HR_REP' ,
6500.00 , 0.00 , 101 , 40) ,
(default , 'Hermann' , 'Baer' , 'HBAER' , '515.123.8888' , '1987-09-29' , 'PR_REP' ,
10000.00 , 0.00 , 101 , 70) ,
(default , 'Shelley' , 'Higgins' , 'SHIGGINS' , '515.123.8080' , '1987-09-30' , 'AC_MGR' ,
12000.00 , 0.00 , 101 , 110) ,
(default , 'William' , 'Gietz' , 'WGIETZ' , '515.123.8181' , '1987-10-01' , 'AC_ACCOUNT' ,
8300.00 , 0.00 , 205 , 110) ;

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1. Write a query to get a unique department ID from employee table.
2. Write a query to update the phone\_number column with '999' where the substring '124' found in that column.
3. Write a query to find the details of those employees who contain eight or more characters in their first name.
4. Write a query to get all the first name from the employees table in upper case

5. Write a query to join the text '@example.com' with the email column.

*Sample Output :* SKING@example.com

6. Write a query to get the employee id, first name and hire month of an employee.
7. Write a query to extract the last four character of phone numbers
8. Write a query that displays the first name and the length of the first name for all employees whose name starts with the letters 'A', 'J' or 'M'. Give each column an appropriate label. Sort the results by the employees' first names.
9. Write a query to get the maximum salary of an employee working as a Programmer.
10. Write a query to get the difference between the highest and lowest salaries.
11. Write a query to find the manager ID and the salary of the lowest-paid employee under that manager.
12. Write a query to display the name, including first\_name and last\_name and salary for all employees whose salary is out of the range between \$10,000 and \$15,000.
13. Write a query to display the last name, job, and salary for all those employees who hasn't worked as a Programmer or a Shipping Clerk, and not drawing the salary \$4,500, \$10,000, or \$15,000.
14. Write a query to select first ten records from a table.
15. Write a query to display the last name of employees having 'e' as the third character.