Assignment 6

Question 1)

Question 2)

```
-- Shayan 27027
    Use a CTE to calculate how many people have salary above or below the company average.
    I want two columns, with two rows, one column that shows "Above Average" and "Below Average", other
    column that shows the respective count.
  with company_average as (
       select salary, avg(salary) over() as avg --created whole column for salary
        from OEHR_EMPLOYEES
   salary_type as (
       select case
                when salary > avg then 'Above Average'
                when salary < avg then 'Below Average'
else 'Average' -- just included though this case isn't there in the data
               end as salary_category
       from company_average
   select
         salary_category,
         count(*) as count
   from salary_type
  group by salary_category;
Results Messages
   salary_category count
Above Average 51
   Below Average 56
```

Question 3)

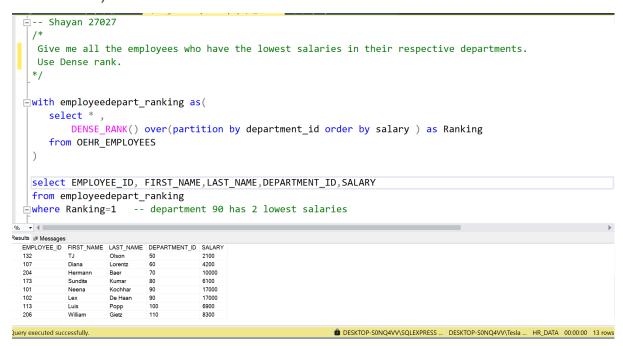
```
⊟-- Shayan 27027
|/*
        Create a CTE to only have those employees who have salary above company average, and then join this CTE with the department table to bring out the count of employees
         (only those employees with salary above company average) with department names.
     -- finding above-average salaried employees
with average as(
    select * , avg(salary) over() as avg
                                 avg(salary) over() as avg
                from OEHR_EMPLOYEES
        ),
abv_avg as(
                select a.*
from OEHR_EMPLOYEES as a
                inner join average as b
on a.EMPLOYEE_ID=b.EMPLOYEE_ID
                where a.salary > b.avg
        '-- above average salaried employees count for each department select b.department_name , count(*) as count
        from abv_avg as a
left join OEHR_DEPARTMENTS as b
on a.DEPARTMENT_ID=b.DEPARTMENT_ID
group by b.DEPARTMENT_NAME
order by count desc
100 % 🔻 🖣

Results 

Messages
     | department_name | count |
| Sales | 30 |
| Finance | 6 |
| Shipping | 4 |
| Executive | 3 |

    Query executed successfully.
```

Question 4)



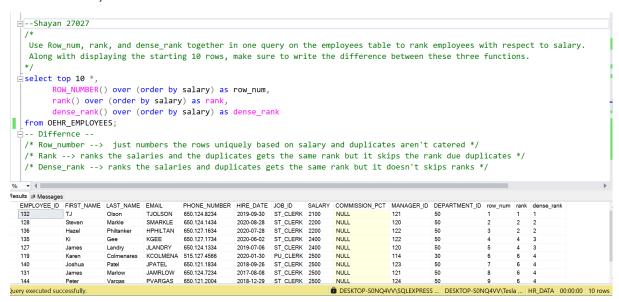
Question 5)

```
-- Shayan 27027
     Give me all the employees who have the Highest salaries in their respective departments and job titles.
     Use Dense rank.
   with high ranking as(
         select EMPLOYEE_ID, concat(FIRST_NAME, ' ', LAST_NAME) as name, a.department_id, b.department_name, salary,
              DENSE_RANK() over(partition by a.department_id, b.department_name order by salary desc ) as Ranking
         from OEHR_EMPLOYEES as a
         left join OEHR_DEPARTMENTS as b
         on a.DEPARTMENT_ID=b.DEPARTMENT_ID
     Select *
     from high ranking
     where Ranking=1

Results 

Messages
    EMPLOYEE_ID name
                               department id department name
   178
200
201
114
                 Kimberely Grant NULL
                                           NULL
                                                          7000
                 Jennifer Whalen
Michael Hartstein
                                           Administrat
Marketing
                                                          4400
                 Den Raphaely
                                                          11000
                                           Purchasing
                Susan Mavris
Adam Fripp 50
Alexander Hunold 60
Hermann Baer 70
Iohn Russell 80
                               40
    203
                 Susan Mavris
                                           Human Resources
                                                          6500
    121
                                           Shipping
                                                          8200
                                           Public Relations
                                           Sales
                                                                                           DESKTOP-SONQ4VV\SQLEXPRESS ... DESKTOP-SONQ4VV\Tesla ... HR DATA 00:00:00 12 rows
```

Question 6)



Question 7)

```
-- Shayan 27027
       List the employees who have a job title that is not present in the job history table.
       Use CTE, not subquery.
   ⊨with Job as(
          SELECT Distinct JOB_ID
          FROM OEHR_JOB_HISTORY
     SELECT a.employee_id, a.job_id
FROM OEHR_EMPLOYEES a
     LEFT JOIN Job b
     ON a.job_id = b.job_id
     WHERE b.job_id IS NULL;
   | -- Shayan 27027
% ▼ 1

Results 

Messages
   employee_id job_id
100 AD_PRES
101 AD_VP
102 AD_VP
108 FI_MGR
    109
110
111
112
                FI_ACCOUNT
FI_ACCOUNT
FI_ACCOUNT
FI_ACCOUNT
                FI ACCOUNT
    113
                                                                                                   â DESKTOP-S0NQ4VV∖SQLEXPRESS ... | DESKTOP-S0NQ4VV\Tesla ... | HR_DATA | 00:00:00 | 43 rows
```

Question 8)

```
-- Shayan 27027
    Find the names of employees who have been in the company longer than the average tenure of employees
    in their department. Use CTE, not subquery.
  i⊓ with average as (
       SELECT DEPARTMENT_ID,
           AVG(DATEDIFF(Day, HIRE_DATE, GETDATE())) AS AvgTenure
       FROM OEHR_EMPLOYEES
       GROUP BY DEPARTMENT_ID
    select first_name, last_name, a.department_id, datediff(day, HIRE_DATE,getdate()) as diff, AvgTenure
    from OEHR_EMPLOYEES as a
    left join average as b
   on a.DEPARTMENT_ID=b.DEPARTMENT_ID
    where datediff(day, HIRE_DATE,getdate()) > AvgTenure
Results Messages
 DESKTOP-S0NQ4VV\SQLEXPRESS ... | DESKTOP-S0NQ4VV\Tesla ... | HR_DATA | 00:00:00 | 50 rows
Query executed successfully.
```

Question 9)

