**Aggregate Functions:**

1. (✔)Show the maximum, minimum salary and total no of employees from employees table.
2. (✔)Show the department wise maximum salary, print the department id and the corresponding maximum salary only
3. (✔)Show the department name, the total no of employees and average salary of that department
4. (✔)Show the manager id and total no of employees handled by that manager.
5. (✔)Show the manager id, manager name and total no of employees handled by that manager
6. (✔)For each region, show the region name and the total no of locations in that region where the locations are not within the territory of these countries “Israel”, “Nigeria” and avoid those regions that contains less than 7 locations. Show the output in descending order of total no of locations.
7. (✔)For each department and each job type show the total no of employees receiving distinct salaries.
8. (✔)For job id and average salary of those job types whose average salary is less than 5000
9. (✔)For each employee, find the total number of employees those were hired before him/her.  
   Print employee last name and total no of employees
10. (✔)For all departments, find the number of employees who get more than 10k salary. Print the  
    DEPARTMENT\_ID and total number of such employees.
11. (✔)Write a query to get the average salary for all departments employing more than 10 employees.
12. (✔)Find the employees having salaries greater than at least three other employees

Solutions:

1. select max(salary), min(salary), count(\*)

from employees

2. select DEPARTMENT\_ID, max(salary)

from employees

group by DEPARTMENT\_ID

3. select d.department\_name, count(\*), avg(e.salary)

from departments d join employees e on e.DEPARTMENT\_ID=d.DEPARTMENT\_ID

group by d.DEPARTMENT\_ID

4. select MANAGER\_ID, count(\*)

from employees

group by MANAGER\_ID

5. select m.employee\_id, m.first\_name, count(\*)

from employees m join employees e on m.EMPLOYEE\_ID=e.MANAGER\_ID

group by m.EMPLOYEE\_ID, m.FIRST\_NAME

6. select r.region\_name, count(\*) as no\_of\_locations

from regions r join countries c on c.REGION\_ID = r.REGION\_ID

join locations l on l.COUNTRY\_ID = c.COUNTRY\_ID

where c.COUNTRY\_NAME NOT IN( "Israel", "Nigeria")

group by r.REGION\_ID

HAVING no\_of\_locations >= 7

order by no\_of\_locations

7. select department\_id, job\_id ,count(distinct salary)

from employees

group by department\_id, job\_id

8. SELECT JOB\_ID, AVG(SALARY)

FROM employees

GROUP BY JOB\_ID

HAVING AVG(SALARY) <= 5000

9. select e1.last\_name, count(\*)

from employees e1 join employees e2 on e1.HIRE\_DATE > e2.HIRE\_DATE

group by e1.EMPLOYEE\_ID

10. select DEPARTMENT\_ID, count(\*)

from employees

where SALARY>=10000

group by department\_id

11. select DEPARTMENT\_ID, avg(SALARY)

from employees

group by DEPARTMENT\_ID

HAVING count(\*)>10

12. select e1.\*

from employees e1 join employees e2 on e1.SALARY>e2.SALARY

group by e1.SALARY

having count(\*) > 3