**ORACLE SQL ASSESSMENT**

1) Write a SQL query to display the employees with employee\_id ,first\_name,job\_id and job\_id Display the only the employee if gross\_salary is greater that $12000,where gross salary is by calculate the salary and commission\_pct.Sort the record based on employee\_id.

--First query

**select employee\_id,first\_name,job\_id,salary+(salary\*commission\_pct) as gross\_salary**

**from EMPLOYEES**

**where salary+(salary\*NULLIF(commission\_pct,0)) > 12000**

**order by employee\_id asc;**

2) write a SQL query to find out which departments have at least 10 employees.

--second query

**select department\_id , count(\*) as employees\_per\_department**

**from EMPLOYEES**

**group by DEPARTMENT\_ID**

**having count(\*) >= 10;**

3) write a SQL query to find the department name, full name (first and last name) of the manager and their city.

--THIRD QUERY

**SELECT**

**D.DEPARTMENT\_NAME,**

**D.MANAGER\_ID,**

**E.FIRST\_NAME,**

**E.LAST\_NAME,**

**L.CITY**

**FROM**

**DEPARTMENTS D**

**JOIN LOCATIONS L ON D.LOCATION\_ID = L.LOCATION\_ID**

**JOIN EMPLOYEES E ON D.MANAGER\_ID = E.MANAGER\_ID;**

4) Write a SQL query to display the employees with employee\_id,first\_name, job\_id,salary and net\_salary where calculated after tax deduction from salary if

I. salary is greater than 20000 then tax amount is 10% tax

II.salary between 15000 and 20000 then tax amount is 8% tax

III. salary between 10000 and 14999 then tax amount is 6% tax

IV. salary between 8000 and 9999 then tax amount is 4 % tax

V. salary between 5000 and 7999 then tax amount is 2% tax

VI.if salary is less than 5000 is 0% tax

--fourth query

**select employee\_id,first\_name,job\_id,salary,**

**CASE**

**when salary > 20000 then salary - salary\*0.1**

**when salary between 15000 and 20000 then salary - salary\*0.8**

**when salary between 10000 and 14999 then salary - salary\*0.6**

**when salary between 8000 and 9999 then salary - salary\*0.4**

**when salary between 5000 and 7999 then salary - salary\*0.2**

**else salary**

**end as net\_salary**

**from employees;**

5) Write a SQL query to display employee\_id,first\_name&last\_name as emp\_name,job\_id and department\_id- department\_name as"Dept"(example:50-Shipping).Sort the based department\_id and salary as decendingorder.

--FIFTH QUERY

**SELECT e.employee\_id,e.first\_name||' '||e.last\_name as emp\_name,**

**e.job\_id,e.department\_id,d.department\_name from EMPLOYEES e**

**join DEPARTMENTS d on**

**e.DEPARTMENT\_ID = d.DEPARTMENT\_ID**

**order by department\_id desc , salary desc;**

6) write a SQL query to find those employees whose first name contains the letter ‘z’. Return first name, last name, department, city, and state province.Sort the employees based on firstname

--6TH QUERY

**WITH cte AS (**

**SELECT**

**d.department\_id,**

**d.department\_name,**

**l.city,**

**l.state\_province**

**FROM**

**departments d**

**INNER JOIN**

**locations l ON d.location\_id = l.location\_id**

**ORDER BY**

**d.department\_id ASC**

**)**

**SELECT e.first\_name,e.last\_name,c.department\_name,c.city,c.state\_province**

**from EMPLOYEES e inner join cte c on e.DEPARTMENT\_ID = c.department\_id**

**where e.FIRST\_NAME LIKE '%z%'**

**order by e.FIRST\_NAME asc;**

7) write a SQL query to find the employees and their managers. These managers do not work under any manager. Return the first name of the employee and manager

--7TH QUERY

**SELECT E1.EMPLOYEE\_ID,**

**E1.FIRST\_NAME || ' ' || E1.LAST\_NAME AS FULL\_NAME,**

**E2.MANAGER\_ID**

**FROM EMPLOYEES E1**

**JOIN EMPLOYEES E2**

**ON E1.EMPLOYEE\_ID = E2.MANAGER\_ID;**

**-------DOUBT------------**

**-- SELECT**

**-- e.FIRST\_NAME AS EmployeeName,**

**-- m.FIRST\_NAME AS ManagerName**

**-- FROM**

**-- EMPLOYEES e**

**-- LEFT JOIN**

**-- EMPLOYEES m ON e.MANAGER\_ID = m.EMPLOYEE\_ID**

**-- WHERE m.MANAGER\_ID IS NULL;**

**by JOB\_ID;**

8) write a SQL query to find all employees who joined on 1st January 2005 to 31th 2006 Display the employee\_id,first\_name, job title, department name and joining date of the job.

--8TH QUERY

**SELECT**

**e.employee\_id,**

**e.first\_name,**

**e.job\_id,**

**e.hire\_date,**

**d.department\_name**

**FROM**

**employees e**

**INNER JOIN**

**departments d ON e.department\_id = d.department\_id**

**WHERE**

**e.hire\_date BETWEEN DATE '2005-01-01' AND DATE '2007-12-31';**

9) write a SQL query to calculate the difference between the maximum salary of the job and the employee's salary.Disaplay the employee\_id, employee name(first\_name&last\_name) and salary difference. Sort the record based on employee\_id.

--ninth query

**SELECT**

**employee\_id,**

**first\_name || ' ' || last\_name AS full\_name,**

**job\_id,**

**salary,**

**(SELECT MAX(salary) FROM employees) - salary AS diff\_salary**

**FROM**

**employees**

**ORDER BY**

**employee\_id;**

10) write a SQL query to calculate the average salary of employees for each job title.

--tenth query

**select job\_id , avg(salary) from EMPLOYEES**

**group by JOB\_ID;**

11) write a SQL query to find all departments, including those without employees. Return first name, last name, department ID, department name

**select e.first\_name,e.last\_name,d.department\_id,d.department\_name**

**from DEPARTMENTS d left join EMPLOYEES e on**

**e.DEPARTMENT\_ID = d.DEPARTMENT\_ID;**

12) write a SQL query to find the employees and their managers. Return the first name of the employee and manager's first\_name and sort the record based on employee\_id.

**SELECT e1.employee\_id, e1.first\_name AS employee\_name, e2.first\_name AS manager\_name**

**FROM employees e1**

**JOIN employees e2 ON e1.manager\_id = e2.employee\_id**

**order by e1.employee\_id;**

13) Write a SQL query to display the department name, city, and state province for each department.

**select d.department\_name,c.city,c.state\_province**

**from departments d inner join locations c on**

**d.location\_id = c.location\_id;**

14) write a SQL query to find out which employees have or do not have a department. Display employee\_id,first name, last name, department ID, department name.

15) write a SQL query to find the employees who earn $12000 or more after calculate of salary and commission.Display the employee\_ID, first\_name, Hire\_date, job ID and department ID. Sort the record baed employee\_id.

**select employee\_id,first\_name,job\_id,hire\_date,department\_id**

**from EMPLOYEES**

**where salary+(salary\*commission\_pct) >= 12000**

**order by employee\_id;**

16) write a SQL query to find the employees who earn $15000 or more after calculate of salary and commission as "Net\_Sal".Display the employee\_ID, first\_name an Net\_sal. Sort the record based on Net\_sal.

**select employee\_id,first\_name,job\_id,hire\_date,department\_id,salary+(salary\*commission\_pct) as Net\_sal**

**from EMPLOYEES**

**where salary+(salary\*commission\_pct) >= 15000**

**order by Net\_sal asc;**

17) Write a SQL query to display the employees with employee\_id,first\_name, job\_id,salary and

tax percentage based on there salary ranage as "Tax\_Amt".

If salary is greater than 20000 then tax amount is 10% tax

If salary between 15000 and 20000 then tax amount is 8% tax

If salary between 10000 and 14999 then tax amount is 6% tax

If salary between 8000 and 9999 then tax amount is 4 % tax

If salary between 5000 and 7999 then tax amount is 2% tax

if salary is less than 5000 is 0% tax

**select employee\_id,first\_name,job\_id,salary,**

**CASE**

**when salary > 20000 then salary\*0.1**

**when salary between 15000 and 20000 then salary\*0.8**

**when salary between 10000 and 14999 then salary\*0.6**

**when salary between 8000 and 9999 then salary\*0.4**

**when salary between 5000 and 7999 then salary\*0.2**

**else salary\*0**

**end as Tax\_Amt**

**from employees;**

18) Write a SQL query to display the employees with employee\_id ,first\_name job\_id and gross\_salary

by calculate the salary and commission\_pct.

**select employee\_id ,first\_name,job\_id,**

**(salary + (salary \* COALESCE(commission\_pct,1))) as gross\_salary**

**from employees;**

19) write a SQL query to find the department name, full name (first and last name) of the manager and their city. where manager is managing more than 10 employees

**select d.department\_id,e.first\_name||' '||e.last\_name as full\_name,l.city**

**from**

**departments d**

**join employees e on d.manager\_id = e.employee\_id**

**join locations l on l.location\_id = d.location\_id**

**where e.employee\_id in(**

**select manager\_id**

**from employees**

**where manager\_id is not null**

**group by manager\_id**

**having count(\*) >= 10**

**);**

20) write a SQL query to display the employees with employee\_id, first\_name, job\_id and department\_name. Who worked more than 15 years in company.

**select e.employee\_id,e.first\_name,e.job\_id,d.department\_name**

**from employees e join departments d on e.department\_id = d.department\_id**

**where sysdate - e.hire\_date >= 15**

**order by e.employee\_id;**

21) write a SQL query to calculate the average salary, the number of employees receiving commissions in that department. Display the department name, average salary and No\_of\_emp.Order the record by No\_of\_emp as desending order.

**SELECT DISTINCT**

**department\_id,**

**round(AVG(salary),0) as avg\_salary,**

**COUNT(\*) AS no\_of\_employees**

**FROM**

**employees**

**WHERE**

**COMMISSION\_PCT IS NOT NULL**

**GROUP BY**

**department\_id**

**ORDER BY**

**no\_of\_employees;**

22) write a SQL query to find the name of the country, city, and departments, which are running.

**select d.department\_name,l.city,l.country\_id from**

**departments d join locations l on d.location\_id = l.location\_id;**

23) \*\*\*\*\*write a SQL query to find the department name and the full name (first and last name) of the manager.

**select d.department\_name, e1.first\_name||' '||e1.last\_name as manager\_name**

**from**

**departments d**

**JOIN employees e1 ON d.department\_id = e1.department\_id**

**JOIN employees e2 ON d.manager\_id = e2.employee\_id;**

24) Write a SQL query to display the job\_id and sum of salary as Total\_salary. Display only the job\_id where sum of salary is greater than $50,000.

**SELECT**

**job\_id,**

**SUM(salary) AS Total\_salary**

**FROM**

**employees**

**GROUP BY**

**job\_id**

**HAVING**

**SUM(salary) > 50000;**

25) Write a SQL query to find max sum of salary is given to job\_id.Display the job\_id and sum of salary as Total\_salary

**SELECT job\_id, SUM(salary) AS Total\_salary**

**FROM employees**

**GROUP BY job\_id**

**ORDER BY Total\_salary DESC;**

26) write a SQL query to find the first name, last name, department, city, and state province for each employee.Sort based on employee\_id

**select e.employee\_id, e.first\_name,e.last\_name,d.department\_name,l.city**

**from**

**employees e**

**join departments d on e.department\_id = d.department\_id**

**join locations l on d.location\_id = l.location\_id**

**order by e.employee\_id asc;**

27) \*\*write a SQL query to find the first name, last name, salary, and job grade for all employees.Sort based on Salary in desecending order.

28) write a SQL query to calculate the average salary of employees for each job title and department\_name.Sort based on department\_id.

**SELECT**

**e.job\_id,**

**d.department\_name,**

**AVG(e.salary) AS average\_salary**

**FROM**

**employees e**

**JOIN**

**departments d ON e.department\_id = d.department\_id**

**GROUP BY**

**d.department\_id, e.job\_id ,d.department\_name**

**ORDER BY**

**d.department\_id;**

29) write a SQL query to find the employees who earn $12000 or more.Display the employee\_ID, first\_name, Hire\_date, job ID and department ID.

**select EMPLOYEE\_ID,job\_id,FIRST\_NAME,HIRE\_DATE,DEPARTMENT\_ID from**

**employees**

**where salary > 12000**

**order by employee\_id;**

30) write a SQL query to find all those employees who work in department ID 90 or 50. Display the employee\_id,first name, last name, department number and department name.

**select e.employee\_id,e.first\_name,e.last\_name,d.department\_id,d.department\_name**

**from**

**employees e**

**join departments d on e.department\_id = d.department\_id**

**where d.department\_id in (90,50)**

**order by d.department\_id;**