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Post Graduate Diploma in Advance Computing

Database Technologies Assignment – 5

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1. Write a query to display the last name, department number, and department name for all employees.

```
select last_name, employees.department_id, department_name from employees, departments
where employees.department_id=departments.department_id;
```

2. Display the employee last name and department name for all employees who have an 'a' (lowercase) in their last names.

```
select last_name, employees.department_id, department_name from employees, departments
where employees.department_id=departments.department_id and last_name like '%a%';
```

3. Write a query to display the employee last name, department name, location ID, and city of all employees who earn a commission.

```
select last_name, department_name, l.location_id, city
from employees e, departments d, locations l
where e.department_id=d.department_id and d.location_id=l.location_id
and commission_pct is not null;
```

4. Write a query to display the last name, job, department number, and department name for all employees who work in Toronto.

```
select last_name, job_id, e.department_id, d.department_name
from employees e, departments d, locations l
where e.department_id=d.department_id and d.location_id=l.location_id
and l.city='Toronto'
```

5.

a. Display the employee last name and employee number along with their manager's last name and manager number. Label the columns Employee, Emp#, Manager, and Mgr#, respectively.

```
select e.last_name Employee, e.employee_id Emp#, m.last_name Manager, m.employee_id Mgr#
from employees e, employees m
where e.manager_id=m.employee_id;
```

b. Display all employees including King, who has no manager.

```
select * from employees where manager_id is null;
```

6: Display the manager number and the salary of the lowest paid employee for that manager. Exclude anyone whose manager is not known. Exclude any groups where the minimum salary is \$6,000 or less. Sort the output in descending order of salary.

```
select manager_id, MIN(salary)
from EMPLOYEES e
where salary >= 6000 and manager_id is not null
group by manager_id
order by MIN(salary);
```

7: Write a query to display the number of people with the same job.

```
select count(*), job_id from EMPLOYEES e group by job_id;
```

8: Write a query to display the minimum, maximum, sum, and average salary for each job type.

```
select job_id, min(salary), max(salary), sum(salary), avg(salary) from EMPLOYEES e group by job_id;
```

9. Write a query to display each department's name, location, number of employees, and the average salary for all employees in that department. Label the columns Name, Location, Number of People, and Salary, respectively. Round the average salary to two decimal places.

```
select department_name NAME, location_id LOCATION,
count(*) NUMBEROFPEOPLE, round(avg(salary),2) SALARY
from employees e, departments d
where e.department_id=d.department_id
group by department_name, location_id;
```

10. Create a query to display the name and hire date of any employee hired after employee Davies.

```
select last_name, hire_date from employees
where hire_date-(select hire_date from employees where last_name='Davies')>0;
```

12. Write a query to display the last name and hire date of any employee in the same department as Zlotkey. Exclude Zlotkey.

```
select last_name, department_id, hire_date from employees
where last_name != 'Zlotkey' and
department_id = (select department_id from employees where last_name='Zlotkey');
```

13: Display the last name and salary of every employee who reports to King.

```
select employee_id, last_name, manager_id, salary from employees
where manager_id ='100';
```

14. Create a query to display the employee numbers and last names of all employees who earn more than the average salary. Sort the results in ascending order of salary.

```
SELECT employee_id, last_name , salary FROM employees WHERE salary >
(SELECT AVG (salary) FROM employees ) order by salary ;
```

15. Display the names and hire dates for all employees who were hired before their managers, along with their manager's names and hire dates. Label the columns Employee, Emp Hired, Manager, and Mgr Hired, respectively.

```
select e1.first_name employee, e1.hire_date Emphired, e2.first_name manager, e2.hire_date
Mgr_hired from employees e1, employees e2 where e1.manager_id=e2.employee_id and
e1.hire_date < e2.hire_date;
```

16. Write a query that displays the employee numbers and last names of all employees who work in a department with any employee whose last name contains a 'u'.

```
select employee_id, last_name from employees where department_id in (select department_id
from employees where last_name like '%u%');
```

17. Modify the query in Exercise 16 to display the employee numbers, last names, and salaries of all employees who earn more than the average salary and who work in a department with any employee with a u in their name.

```
select employee_id, last_name, salary from employees where department_id in (select
department_id from employees where last_name like '%u%') and salary > (select avg(salary) from
employees)
```

18. Write a query to display Third Highest Salary

```
select salary from
(select salary from
(select distinct salary from employees order by salary desc)
where rownum<=3 order by salary ) where rownum=1
```