1. Display details of jobs where the minimum salary is greater than 10000.

*select \* from jobs*

*where min\_salary > 10000;*

1. Display the first name and join date of the employees who joined between 1980 and 1995.

*select first\_name, hire\_date*

*from employees*

*where to\_char(hire\_date, 'YYYY') between 1980 and 1995;*

1. Display first name and join date of the employees who is either IT Programmer or Sales Man.

*select first\_name, hire\_date*

*from employees*

*where job\_id = 'IT\_PROG' or job\_id = 'SA\_MAN';*

1. Display employees who joined after 1st January 1998.

*select \* from employees*

*where hire\_date > '01-jan-1998';*

1. Display details of employee with ID 150 or 160.

*select \* from employees*

*where employee\_id in (150,160);*

1. Display first name, salary, commission pct, and hire date for employees with salary less than 10000.

*select first\_name, salary, commission\_pct, hire\_date*

*from employees*

*where salary < 10000;*

1. Display job Title, the difference between minimum and maximum salaries for jobs with max salary in the range 10000 to 20000.

*select job\_title, (max\_salary - min\_salary)*

*from jobs*

*where max\_salary between 10000 and 20000;*

1. Display first name, salary, and round the salary to thousands.

*select first\_name, salary,*

*round(salary,3)*

*from employees;*

1. Display details of jobs in the descending order of the title.

*select job\_title*

*from jobs*

*order by job\_title desc;*

1. Display employees where the first name or last name starts with S.

*select first\_name, last\_name*

*from employees*

*where first\_name like 'S%' or last\_name like 'S%';*

1. Display employees who joined in the month of May.

*select \* from employees*

*where to\_char(hire\_date, 'MM') = 05;*

1. Display details of the employees where commission percentage is null and salary in the range 5000 to 10000 and department is 30.

*select \* from employees*

*where commission\_pct is null*

*and salary between 5000 and 10000*

*and department\_id = 30;*

1. Display first name and date of first salary of the employees.

*select first\_name, hire\_date, add\_months(last\_day(hire\_date), 1)*

*from employees;*

1. Display first name and experience of the employees.

*select first\_name, to\_char(sysdate, 'yyyy') - to\_char(hire\_date,'yyyy')*

*from employees;*

1. Display first name of employees who joined in 1991.

*select first\_name, hire\_date from employees*

*where to\_char(hire\_date, 'YYYY') = 1991;*

1. Display first name and last name after converting the first letter of each name to upper case and the rest to lower case.

*select INITCAP(first\_name), INITCAP(last\_name)*

*from employees;*

1. Display the first word in job title.

*select regexp\_substr(job\_title,'[A-z]\*') first\_name*

*from jobs;*

1. Display the length of first name for employees where last name contain character ‘b’ after 3rd position.

*select first\_name, last\_name*

*from employees*

*where instr(last\_name,'b') > 3;*

1. Display first name in upper case and email address in lower case for employees where the first name and email address are same irrespective of the case.

*select upper(first\_name), lower(email)*

*from employees*

*where upper(first\_name) = upper(email);*

1. Display employees who joined in the current year.

*select \* from employees*

*where to\_char(hire\_date,'YYYY') = to\_char(sysdate,'YYYY');*

1. Display the number of days between system date and 1st January 2011.

*select round(sysdate-TO\_date('01/01/2011','DD/MM/YYYY'))*

*from dual;*

1. Display how many employees joined in each month of the current year.

*select count(to\_char(hire\_date,'Month')) as month\_count*

*from employees*

*group by hire\_date*

*having to\_char(hire\_date,'YYYY') = to\_char(sysdate,'YYYY');*

1. Display manager ID and number of employees managed by the manager.

*select manager\_id, count(employee\_id)*

*from employees*

*where manager\_id is not null*

*group by manager\_id;*

1. Display employee ID and the date on which he ended his previous job.

*select employee\_id, hire\_date-1 as end\_date*

*from employees;*

1. Display number of employees joined after 15th of the month.

*select count(\*) as half\_month*

*from employees*

*where to\_char(hire\_date,'dd') > 15;*

1. Display the country ID and number of cities we have in the country.

*select country\_id, count(city)*

*from locations*

*group by country\_id;*

1. Display average salary of employees in each department who have commission percentage.

*select round(avg(salary)), department\_id*

*from employees*

*where commission\_pct is not null*

*group by department\_id;*

1. Display job ID, number of employees, sum of salary, and difference between highest salary and lowest salary of the employees of the job.

*select job\_id, count(employee\_id), sum(salary), (max(salary)-min(salary))*

*from employees*

*group by job\_id;*

1. Display job ID for jobs with average salary more than 10000.

*select job\_id, avg(salary)*

*from employees*

*group by job\_id*

*where avg(salary) > 10000;*

1. Display years in which more than 10 employees joined.

*select to\_char(hire\_date,'YYYY')*

*from employees*

*group by to\_char(hire\_date,'YYYY')*

*having count(employee\_id) > 10;*

1. Display departments in which more than five employees have commission percentage.

*select department\_id, count(employee\_id)*

*from employees*

*where commission\_pct is not null*

*group by department\_id*

*having count(commission\_pct) > 5;*

1. Display employee ID for employees who did more than one job in the past.

*select employee\_id from job\_history*

*group by employee\_id*

*having count(\*) > 1;*

1. Display job ID of jobs that were done by more than 3 employees for more than 100 days.

*select job\_id from job\_history*

*where end\_date - start\_date > 100*

*group by job\_id*

*having count(employee\_id) > 3;*

1. Display department ID, year, and Number of employees joined.

*select department\_id, to\_char(hire\_date,'YYYY'), count(employee\_id)*

*from employees*

*group by department\_id, to\_char(hire\_date,'YYYY')*

*order by department\_id;*

1. Display departments where any manager is managing more than 5 employees.

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

*from employees e join departments d*

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

*group by e.department\_id, e.manager\_id, d.department\_name*

*having count(e.manager\_id) > 5;*

1. Change salary of employee 115 to 8000 if the existing salary is less than 6000.

*update employees set salary = 8000*

*where employee\_id = 115 and salary < 6000;*

1. Insert a new employee into employees with all the required details.

*insert into employees (employee\_id, first\_name, last\_name, email, phone\_number, hire\_date,job\_id, salary, department\_id)*

*values (99, 'Bhakti', 'Chotalia','bhaktichotalia','010 015 1997', sysdate, 'IT\_PROG', 25000, 60);*

1. Delete department 20.

*delete from departments*

*where department\_id=270;*

1. Change job ID of employee 110 to IT\_PROG if the employee belongs to department 10 and the existing job ID does not start with IT.

*update employees*

*set job\_id='IT\_PROG'*

*where employee\_id = 110 and department\_id=10 and job\_id not like 'IT%';*

1. Insert a row into departments table with manager ID 120 and location ID in any location ID for city Tokyo.

*insert into departments*

*values(270,'random',120,(select location\_id from locations where city='Tokyo'));*

1. Display department name and number of employees in the department.

*select department\_name, count(\*)*

*from employees*

*natural join departments*

*group by department\_name;*

1. Display job title, employee ID, number of days between ending date and starting date for all jobs in department 30 from job history.

*select employee\_id, job\_title, end\_date-start\_date days*

*from job\_history*

*natural join jobs*

*where department\_id=30;*

1. Display department name and manager first name.

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

*from departments d*

*join employees e*

*on d.manager\_id = e.employee\_id;*

1. Display department name, manager name, and city.

*select department\_name, first\_name, city*

*from departments d*

*join employees e*

*on (d.manager\_id=e.employee\_id)*

*join locations l*

*using (location\_id);*

1. Display country name, city, and department name.

*select co.country\_name, l.city, d.department\_name*

*from countries co*

*join locations l*

*using(country\_id)*

*join departments d*

*using(location\_id);*

1. Display job title, department name, employee last name, starting date for all jobs from 2000 to 2005.

*select j.job\_title, d.department\_name, e.last\_name, jh.start\_date*

*from jobs j join employees e*

*using(job\_id)*

*join departments d*

*using(department\_id)*

*join job\_history jh*

*using(job\_id);*

1. Display job title and average salary of employees

*select j.job\_title, avg(e.salary)*

*from employees e left join jobs j*

*on e.job\_id = j.job\_id*

*group by j.job\_title;*

1. Display job title, employee name, and the difference between maximum salary for the job and salary of the employee.

*select job\_title, first\_name, max\_salary - salary difference*

*from employees*

*natural join jobs;*

1. Display last name, job title of employees who have commission percentage and belongs to department 30.

*select e.last\_name, j.job\_title*

*from employees e*

*join jobs j*

*using(job\_id)*

*where department\_id=30*

*and commission\_pct is not null;*

1. Display details of jobs that were done by any employee who is currently drawing more than 15000 of salary.

*select \* from jobs*

*where exists(select employee\_id*

*from employees*

*where salary>15000);*