1. Show the Employees who were hired after Blake.

select \* from emp

where hiredate > (select hiredate from emp where ename = 'BLAKE')

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EMPNO** | **ENAME** | **JOB** | **MGR** | **HIREDATE** | **SAL** | **COMM** | **DEPTNO** |
| 7654 | MARTIN | SALESMAN | 7698 | 09/28/1981 | 1250 | 1400 | 30 |
| 7782 | CLARK | MANAGER | 7839 | 06/09/1981 | 2450 | - | 10 |
| 7788 | SCOTT | ANALYST | 7566 | 12/09/1982 | 3000 | - | 20 |
| 7839 | KING | PRESIDENT | - | 11/17/1981 | 5000 | - | 10 |
| 7844 | TURNER | SALESMAN | 7698 | 09/08/1981 | 1500 | 0 | 30 |
| 7876 | ADAMS | CLERK | 7788 | 01/12/1983 | 1100 | - | 20 |
| 7900 | JAMES | CLERK | 7698 | 12/03/1981 | 950 | - | 30 |
| 7902 | FORD | ANALYST | 7566 | 12/03/1981 | 3000 | - | 20 |

1. List those Employees having same Department Location as of Smith.

SELECT \* FROM emp

WHERE deptno =

(SELECT deptno FROM emp join dept using(deptno) where ename='SMITH' );

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EMPNO** | **ENAME** | **JOB** | **MGR** | **HIREDATE** | **SAL** | **COMM** | **DEPTNO** |
| 7369 | SMITH | CLERK | 7902 | 12/17/1980 | 800 | - | 20 |
| 7566 | JONES | MANAGER | 7839 | 04/02/1981 | 2975 | - | 20 |
| 7788 | SCOTT | ANALYST | 7566 | 12/09/1982 | 3000 | - | 20 |
| 7876 | ADAMS | CLERK | 7788 | 01/12/1983 | 1100 | - | 20 |
| 7902 | FORD | ANALYST | 7566 | 12/03/1981 | 3000 | - | 20 |

1. Enlist those Employees having job same like Clark but salary less than average salary.

SELECT ename, deptno, job FROM emp

WHERE job=(select job from emp where ename='CLARK') and sal < ( select avg(sal) from emp )

no data found

1. Update the names of the employees in lowercase.

update emp

set ename=lower(ename)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EMPNO** | **ENAME** | **JOB** | **MGR** | **HIREDATE** | **SAL** | **COMM** | **DEPTNO** |
| 7369 | smith | CLERK | 7902 | 12/17/1980 | 800 | - | 20 |
| 7499 | allen | SALESMAN | 7698 | 02/20/1981 | 1600 | 300 | 30 |
| 7521 | ward | SALESMAN | 7698 | 02/22/1981 | 1250 | 500 | 30 |
| 7566 | jones | MANAGER | 7839 | 04/02/1981 | 2975 | - | 20 |
| 7654 | martin | SALESMAN | 7698 | 09/28/1981 | 1250 | 1400 | 30 |
| 7698 | blake | MANAGER | 7839 | 05/01/1981 | 2850 | - | 30 |
| 7782 | clark | MANAGER | 7839 | 06/09/1981 | 2450 | - | 10 |
| 7788 | scott | ANALYST | 7566 | 12/09/1982 | 3000 | - | 20 |
| 7839 | king | PRESIDENT | - | 11/17/1981 | 5000 | - | 10 |
| 7844 | turner | SALESMAN | 7698 | 09/08/1981 | 1500 | 0 | 30 |

1. Find the 3rd lowest salary of each job
2. You are not supposed to show the entire salary so now find the one year salary of King and show only 1st digit and last 2 digit like 5\*\*23.

SELECT  ename ,sal,sal\*12,concat(rpad(substr(sal\*12,1,1),(length(sal\*12)-2),'\*'), substr(sal\*12,-2,2) ) as output FROM emp

where ename ='KING'

|  |  |  |  |
| --- | --- | --- | --- |
| **ENAME** | **SAL** | **SAL\*12** | **OUTPUT** |
| KING | 5000 | 60000 | 6\*\*00 |

1. Get those employees who have commission greater than Each employee of department no. 10.

select \* from emp

where comm is not null and comm>all(select comm from emp where deptno=20 and comm is not NULL)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EMPNO** | **ENAME** | **JOB** | **MGR** | **HIREDATE** | **SAL** | **COMM** | **DEPTNO** |
| 7844 | turner | SALESMAN | 7698 | 09/08/1981 | 1500 | 0 | 30 |
| 7499 | allen | SALESMAN | 7698 | 02/20/1981 | 1600 | 300 | 30 |
| 7521 | ward | SALESMAN | 7698 | 02/22/1981 | 1250 | 500 | 30 |
| 7654 | martin | SALESMAN | 7698 | 09/28/1981 | 1250 | 1400 | 30 |

1. Show no. of employees having their total salary **(including commission)** greater than average salary and also those having less than average salary and give appropriate name to both columns.

select (SELECT count(\*) FROM emp WHERE sal > ( select avg(sal) from emp )) as "greater than avg sal",

(SELECT count(\*) FROM emp WHERE sal < ( select avg(sal) from emp ) ) as "less than avg sal" from emp

WHERE ROWNUM=1

|  |  |
| --- | --- |
| **greater than avg sal** | **less than avg sal** |
| 6 | 7 |

1. Increase the salaries using CASE Expression 15% of those employees who are having salary below the average salary and 5 % of those who are having salary greater than average salary.

SELECT ename,sal,deptno,

case when sal < (select avg(sal) from emp) then sal+ (sal\*15)/100

when sal >(select avg(sal) from emp) then sal+ (sal\*5)/100

end "revised salary"

from emp

|  |  |  |  |
| --- | --- | --- | --- |
| **ENAME** | **SAL** | **DEPTNO** | **revised salary** |
| smith | 800 | 20 | 920 |
| allen | 1600 | 30 | 1840 |
| ward | 1250 | 30 | 1437.5 |
| jones | 2975 | 20 | 3123.75 |
| martin | 1250 | 30 | 1437.5 |
| blake | 2850 | 30 | 2992.5 |
| clark | 2450 | 10 | 2572.5 |
| scott | 3000 | 20 | 3150 |
| king | 5000 | 10 | 5250 |
| turner | 1500 | 30 | 1725 |

1. Update the job, deptno and salary of king to match that of Allen.

UPDATE emp

SET (job, deptno,sal) = (SELECT job, deptno,sal

FROM emp

WHERE ename='ALLEN')

WHERE ename='KING'

after this:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EMPNO** | **ENAME** | **JOB** | **MGR** | **HIREDATE** | **SAL** | **COMM** | **DEPTNO** |
| 7499 | ALLEN | SALESMAN | 7698 | 02/20/1981 | 1600 | 300 | 30 |
| 7839 | KING | SALESMAN | - | 11/17/1981 | 1600 | - | 30 |

1. Insert a row in dept table. (deptno=50,name=IT, Loc=Karachi)

INSERT INTO dept (deptno, dname, loc)

VALUES (50, 'IT', 'KARACHI');

after this:

|  |  |  |
| --- | --- | --- |
| **DEPTNO** | **DNAME** | **LOC** |
| 10 | ACCOUNTING | NEW YORK |
| 20 | RESEARCH | DALLAS |
| 30 | SALES | CHICAGO |
| 40 | OPERATIONS | BOSTON |
| 50 | IT | KARACHI |

1. Delete the above inserted row

delete from dept

where deptno=50

after this:

|  |  |  |
| --- | --- | --- |
| **DEPTNO** | **DNAME** | **LOC** |
| 10 | ACCOUNTING | NEW YORK |
| 20 | RESEARCH | DALLAS |
| 30 | SALES | CHICAGO |
| 40 | OPERATIONS | BOSTON |

1. Delete all the employees of Operations department

delete from emp

where deptno=(select deptno from dept where dname ='OPERATIONS')

0 row(s) deleted.

1. Insert a row which will make Allen an employee of deptno 40.

insert into emp

insert into emp

select empno,ename,job,mgr,hiredate,sal,comm,40 from emp

where ename='SMITH';

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EMPNO** | **ENAME** | **JOB** | **MGR** | **HIREDATE** | **SAL** | **COMM** | **DEPTNO** |
| 7369 | SMITH | CLERK | 7902 | 12/17/1980 | 800 | - | 40 |
| 7369 | SMITH | CLERK | 7902 | 12/17/1980 | 800 | - | 20 |

1. Update the location of deptno 20 as NEW YORK

update dept

set loc=('New YORK')

where deptno=20

|  |  |  |
| --- | --- | --- |
| **DEPTNO** | **DNAME** | **LOC** |
| 10 | ACCOUNTING | NEW YORK |
| 20 | RESEARCH | New YORK |
| 30 | SALES | CHICAGO |
| 40 | OPERATIONS | BOSTON |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EMPNO** | **ENAME** | **JOB** | **MGR** | **HIREDATE** | **SAL** | **COMM** | **DEPTNO** |
| 7782 | CLARK | MANAGER | 7839 | 06/09/1981 | 2450 | - | 10 |
| 7839 | KING | PRESIDENT | - | 11/17/1981 | 5000 | - | 10 |
| 7788 | SCOTT | ANALYST | 7566 | 12/09/1982 | 3000 | - | 20 |
| 7876 | ADAMS | CLERK | 7788 | 01/12/1983 | 1100 | - | 20 |
| 7369 | SMITH | CLERK | 7902 | 12/17/1980 | 800 | - | 20 |
| 7902 | FORD | ANALYST | 7566 | 12/03/1981 | 3000 | - | 20 |
| 7566 | JONES | MANAGER | 7839 | 04/02/1981 | 2975 | - | 20 |
| 7499 | ALLEN | SALESMAN | 7698 | 02/20/1981 | 1600 | 300 | 30 |
| 7844 | TURNER | SALESMAN | 7698 | 09/08/1981 | 1500 | 0 | 30 |
| 7698 | BLAKE | MANAGER | 7839 | 05/01/1981 | 2850 | - | 30 |
| 7654 | MARTIN | SALESMAN | 7698 | 09/28/1981 | 1250 | 1400 | 30 |
| 7900 | JAMES | CLERK | 7698 | 12/03/1981 | 950 | - | 30 |
| 7521 | WARD | SALESMAN | 7698 | 02/22/1981 | 1250 | 500 | 30 |