ASSIGNMENT 2

Submitted By
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MCA Ist Sem

Query26. Write a query to display employee name and employee number along with their manager's name and manager's number.

- SELECT
  emp.empno AS "Employee No.",
  emp.ename AS "Employee Name",
  m.empno AS "Manager No.",
  m.ename AS "Manager Name"
  FROM emp
  JOIN emp AS m
  ON emp.mgr = m.empno;

Employee No.	Employee Name	Manager No.	Manager Name
7369	SMITH	7902	FORD
7499	ALLEN	7698	BLAKE
7521	WARD	7698	BLAKE
7566	JONES	7839	KING
7654	MARTIN	7698	BLAKE
7698	BLAKE	7839	KING
7782	CLARK	7839	KING
7788	SCOTT	7566	JONES
7844	TURNER	7698	BLAKE
7876	ADAMS	7788	SCOTT
7900	JAMES	7698	BLAKE
7902	FORD	7566	JONES
7934	MILLER	7782	CLARK

Query27. Write a query to display employee name and employee number along with their manager's name and manager's number along with the employees who do not have a manager.

- ```
  SELECT
  emp.empno,
  emp.ename,
  m.empno,
  m.ename
  FROM emp
  LEFT JOIN emp as m
  ON emp.mgr = m.empno;
  ```

```
+-------+--------+-------+-------+
| empno | ename  | empno | ename |
+-------+--------+-------+-------+
|  7369 | SMITH  |  7902 | FORD  |
|  7499 | ALLEN  |  7698 | BLAKE |
|  7521 | WARD   |  7698 | BLAKE |
|  7566 | JONES  |  7839 | KING  |
|  7654 | MARTIN |  7698 | BLAKE |
|  7698 | BLAKE  |  7839 | KING  |
|  7782 | CLARK  |  7839 | KING  |
|  7788 | SCOTT  |  7566 | JONES |
|  7839 | KING   |  NULL | NULL  |
|  7844 | TURNER |  7698 | BLAKE |
|  7876 | ADAMS  |  7788 | SCOTT |
|  7900 | JAMES  |  7698 | BLAKE |
|  7902 | FORD   |  7566 | JONES |
|  7934 | MILLER |  7782 | CLARK |
+-------+--------+-------+-------+
```
```

Query28. Write a query to display employee name, department number and all the employees that work in the same department as the given employee. Do this for all the employees.

- ```
  SELECT a.ename, a.deptno, b.ename
  FROM emp a, emp b
  WHERE a.deptno = b.deptno AND a.empno <> b.empno;
  ```

ename	deptno	ename
JONES	20	SMITH
SCOTT	20	SMITH
ADAMS	20	SMITH
FORD	20	SMITH
WARD	30	ALLEN
MARTIN	30	ALLEN
BLAKE	30	ALLEN
TURNER	30	ALLEN
JAMES	30	ALLEN
ALLEN	30	WARD
MARTIN	30	WARD
BLAKE	30	WARD
TURNER	30	WARD
JAMES	30	WARD
SMITH	20	JONES
SCOTT	20	JONES
ADAMS	20	JONES
FORD	20	JONES
ALLEN	30	MARTIN
WARD	30	MARTIN
BLAKE	30	MARTIN
TURNER	30	MARTIN
JAMES	30	MARTIN
ALLEN	30	BLAKE
WARD	30	BLAKE
MARTIN	30	BLAKE
TURNER	30	BLAKE
JAMES	30	BLAKE
KING	10	CLARK
MILLER	10	CLARK
SMITH	20	SCOTT
JONES	20	SCOTT
ADAMS	20	SCOTT
FORD	20	SCOTT
CLARK	10	KING
MILLER	10	KING
ALLEN	30	TURNER
WARD	30	TURNER
MARTIN	30	TURNER
BLAKE	30	TURNER
JAMES	30	TURNER
SMITH	20	ADAMS
  ```

JONES	20	ADAMS
SCOTT	20	ADAMS
FORD	20	ADAMS
ALLEN	30	JAMES
WARD	30	JAMES
MARTIN	30	JAMES
BLAKE	30	JAMES
TURNER	30	JAMES
SMITH	20	FORD
JONES	20	FORD
SCOTT	20	FORD
ADAMS	20	FORD
CLARK	10	MILLER
KING	10	MILLER

Query29. Write a query to display the name, job, department name, salary and grade for all employees.

- ```
  SELECT emp.ename, emp.job, dept.dname, emp.sal, salgrade.grade
  FROM emp
  JOIN dept ON dept.deptno = emp.deptno
  JOIN salgrade ON emp.sal BETWEEN salgrade.losal AND salgrade.hisal;
  ```

ename	job	dname	sal	grade
SMITH	CLERK	RESEARCH	800.00	1
ALLEN	SALESMAN	SALES	1600.00	3
WARD	SALESMAN	SALES	1250.00	2
JONES	MANAGER	RESEARCH	2975.00	4
MARTIN	SALESMAN	SALES	1250.00	2
BLAKE	MANAGER	SALES	2850.00	4
CLARK	MANAGER	ACCOUNTING	2450.00	4
SCOTT	ANALYST	RESEARCH	3000.00	4
KING	PRESIDENT	ACCOUNTING	5000.00	5
TURNER	SALESMAN	SALES	1500.00	3
ADAMS	CLERK	RESEARCH	1100.00	1
JAMES	CLERK	SALES	950.00	1
FORD	ANALYST	RESEARCH	3000.00	4
MILLER	CLERK	ACCOUNTING	1300.00	2
  ```

Query30. Write a query to display all names and hire dates of all employees along with their manager's name and hire date for all employees who were hired before their managers.

- SELECT e.ename Employee, e.hiredate HireD, m.ename Manager, m.hiredate HireD FROM emp e JOIN emp m ON e.mgr = m.empno AND e.hiredate < m.hiredate ORDER BY m.ename;

Employee	HireD	Manager	HireD
ALLEN	1981-02-20	BLAKE	1981-05-01
WARD	1981-02-22	BLAKE	1981-05-01
SMITH	1980-12-17	FORD	1981-12-03
BLAKE	1981-05-01	KING	1981-11-17
CLARK	1981-06-09	KING	1981-11-17
JONES	1981-04-02	KING	1981-11-17

Query31. Write a query to display the highest, lowest, sum and average salary of all employees.

- SELECT
  MAX(sal) hisal,
  MIN(sal) losal,
  SUM(sal) sum,
  AVG(sal) avg
  FROM emp;

hisal	losal	sum	avg
5000.00	800.00	29025.00	2073.214286

Query32. Write a query to display minimum, maximum, sum and average salary for each job type.

- SELECT job, MIN(sal), Max(sal), SUM(sal), AVG(sal) FROM emp GROUP BY job;

job	MIN(sal)	Max(sal)	SUM(sal)	AVG(sal)
ANALYST	3000.00	3000.00	6000.00	3000.000000
CLERK	800.00	1300.00	4150.00	1037.500000
MANAGER	2450.00	2975.00	8275.00	2758.333333
PRESIDENT	5000.00	5000.00	5000.00	5000.000000
SALESMAN	1250.00	1600.00	5600.00	1400.000000

Query33. Write a query to display the number of people with the same job.

- SELECT job, COUNT(empno) FROM emp GROUP BY job;

```
+-----------+--------------+
| job       | COUNT(empno) |
+-----------+--------------+
| ANALYST   |            2 |
| CLERK     |            4 |
| MANAGER   |            3 |
| PRESIDENT |            1 |
| SALESMAN  |            4 |
+-----------+--------------+
```

Query34. Write a query to display the difference between the highest and lowest salaries.

- SELECT (MAX(sal)-MIN(sal)) FROM emp;

```
+----------------------+
| (MAX(sal)-MIN(sal)) |
+----------------------+
|              4200.00 |
+----------------------+
```

Query35. Write a query to display the manager number and the salary of the lowest paid employee for that manager. Exclude any groups where the manager id is not known. Exclude any groups where the minimum salary is less than $1000.

- SELECT a.mgr mno, a.min_sal min_sal FROM (SELECT mgr, MIN(sal) min_sal FROM emp GROUP BY mgr) a WHERE (!ISNULL(a.mgr) AND a.min_sal >= 1000) ;

```
+------+---------+
| mno  | min_sal |
+------+---------+
| 7566 | 3000.00 |
| 7782 | 1300.00 |
| 7788 | 1100.00 |
| 7839 | 2450.00 |
+------+---------+
```

Query36. Write a query to display the department name, location name, number of employees and the average salary for all employees in that department.

- SELECT dept.dname, dept.loc, COUNT(emp.empno), AVG(emp.sal) FROM emp RIGHT JOIN dept ON dept.deptno = emp.deptno GROUP BY emp.deptno;

dname	loc	COUNT(emp.empno)	AVG(emp.sal)
OPERATIONS	BOSTON	0	NULL
ACCOUNTING	NEW YORK	3	2916.666667
RESEARCH	DALLAS	5	2175.000000
SALES	CHICAGO	6	1566.666667

Query37. Write a query to display the employee name and hire date for all employees in the same department as Blake.

- SELECT ename, hiredate FROM emp WHERE deptno = (SELECT deptno FROM emp WHERE ename='Blake');

ename	hiredate
ALLEN	1981-02-20
WARD	1981-02-22
MARTIN	1981-09-28
BLAKE	1981-05-01
TURNER	1981-09-08
JAMES	1981-12-03

Query38. Write a query to display the employee number and employee name for all employees who earn more than the average salary.

- SELECT empno, ename FROM emp WHERE sal > (SELECT AVG(sal) FROM emp);

empno	ename
7566	JONES
7698	BLAKE
7782	CLARK
7788	SCOTT
7839	KING
7902	FORD

Query39. Write a query to display the employee number and name for all employees who work in a department with any employee whose name contains a T.

- SELECT empno, ename FROM emp WHERE deptno IN (SELECT deptno FROM emp WHERE LOCATE('T', ename) > 0);

empno	ename
7369	SMITH
7499	ALLEN
7521	WARD
7566	JONES
7654	MARTIN
7698	BLAKE
7788	SCOTT
7844	TURNER
7876	ADAMS
7900	JAMES
7902	FORD

Query40. Write a query to display the employee name and salary of all employees who report to King.

- SELECT ename, sal FROM emp WHERE mgr = (SELECT empno FROM emp WHERE ename='King');

ename	sal
JONES	2975.00
BLAKE	2850.00
CLARK	2450.00

Query41. Write a query to display the department number, name and job for all employees in the Sales department.

- SELECT emp.deptno, emp.ename, emp.job FROM emp WHERE emp.deptno = (SELECT deptno FROM dept WHERE dname='Sales');

deptno	ename	job
30	ALLEN	SALESMAN
30	WARD	SALESMAN
30	MARTIN	SALESMAN
30	BLAKE	MANAGER
30	TURNER	SALESMAN
30	JAMES	CLERK

Query42. Write a query to display the employee number, name and salary for all employees who earn more than the average salary and who work in a department with any employee with a T in their name.

- SELECT empno, ename FROM emp WHERE sal > (SELECT AVG(sal) FROM emp) AND deptno IN (SELECT deptno FROM emp WHERE LOCATE('T', ename) > 0);

```
+-------+-------+
| empno | ename |
+-------+-------+
|  7566 | JONES |
|  7698 | BLAKE |
|  7788 | SCOTT |
|  7902 | FORD  |
+-------+-------+
```