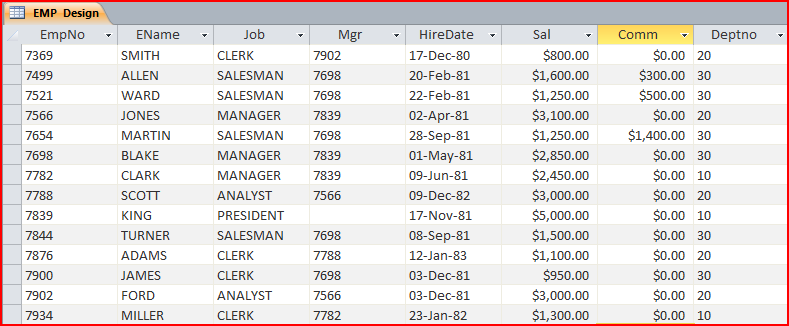
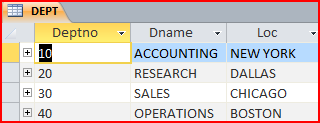
**SQL sample queries using the 2 tables in Access:**



**and**



**DISPLAYING DATA FROM ONE TABLE:**

1. Create a query to display the name, job, hire date and employee number for each employee, with employee number showing first.

SELECT EMPNO, ENAME, JOB, HIREDATE

FROM [EMP Design]

| **Query1** | | | |
| --- | --- | --- | --- |
| **EMPNO** | **ENAME** | **JOB** | **HIREDATE** |
| 7369 | SMITH | CLERK | 17-Dec-80 |
| 7499 | ALLEN | SALESMAN | 20-Feb-81 |
| 7521 | WARD | SALESMAN | 22-Feb-81 |
| 7566 | JONES | MANAGER | 02-Apr-81 |
| 7654 | MARTIN | SALESMAN | 28-Sep-81 |
| 7698 | BLAKE | MANAGER | 01-May-81 |
| 7782 | CLARK | MANAGER | 09-Jun-81 |
| 7788 | SCOTT | ANALYST | 09-Dec-82 |
| 7839 | KING | PRESIDENT | 17-Nov-81 |
| 7844 | TURNER | SALESMAN | 08-Sep-81 |
| 7876 | ADAMS | CLERK | 12-Jan-83 |
| 7900 | JAMES | CLERK | 03-Dec-81 |
| 7902 | FORD | ANALYST | 03-Dec-81 |
| 7934 | MILLER | CLERK | 23-Jan-82 |

1. Create a query to display unique jobs from the EMP table.

SELECT DISTINCT JOB

FROM [EMP Design];

| **Query1** |
| --- |
| **JOB** |
| ANALYST |
| CLERK |
| MANAGER |
| PRESIDENT |
| SALESMAN |

1. Change the query in #1 to label the column heading Emp #, Employee, Job and Hire Date. Use **AS [Emp #]** to create an alias for a new heading.

SELECT EMPNO AS [EMP #], ENAME AS EMPLOYEE, JOB, HIREDATE

FROM [EMP Design];

| **Query1** | | | |
| --- | --- | --- | --- |
| **EMP #** | **EMPLOYEE** | **JOB** | **HIREDATE** |
| 7369 | SMITH | CLERK | 17-Dec-80 |
| 7499 | ALLEN | SALESMAN | 20-Feb-81 |
| 7521 | WARD | SALESMAN | 22-Feb-81 |
| 7566 | JONES | MANAGER | 02-Apr-81 |
| 7654 | MARTIN | SALESMAN | 28-Sep-81 |
| 7698 | BLAKE | MANAGER | 01-May-81 |
| 7782 | CLARK | MANAGER | 09-Jun-81 |
| 7788 | SCOTT | ANALYST | 09-Dec-82 |
| 7839 | KING | PRESIDENT | 17-Nov-81 |
| 7844 | TURNER | SALESMAN | 08-Sep-81 |
| 7876 | ADAMS | CLERK | 12-Jan-83 |
| 7900 | JAMES | CLERK | 03-Dec-81 |
| 7902 | FORD | ANALYST | 03-Dec-81 |
| 7934 | MILLER | CLERK | 23-Jan-82 |

1. Display the name concatenated with the job, separated by a comma and a space. Use the & concatenation operator. Label the column Employee and Title.

SELECT ENAME & ", " & JOB AS [EMPLOYEE and TITLE]

FROM [EMP Design];

| **Query1** |
| --- |
| **EMPLOYEE and TITLE** |
| SMITH, CLERK |
| ALLEN, SALESMAN |
| WARD, SALESMAN |
| JONES, MANAGER |
| MARTIN, SALESMAN |
| BLAKE, MANAGER |
| CLARK, MANAGER |
| SCOTT, ANALYST |
| KING, PRESIDENT |
| TURNER, SALESMAN |
| ADAMS, CLERK |
| JAMES, CLERK |
| FORD, ANALYST |
| MILLER, CLERK |

1. Create a query to display the name and salary of employees earning more than $2850.

SELECT ENAME,SAL

FROM [EMP Design]

WHERE SAL >2850;

| **Query1** | |
| --- | --- |
| **ENAME** | **SAL** |
| JONES | $3,100.00 |
| SCOTT | $3,000.00 |
| KING | $5,000.00 |
| FORD | $3,000.00 |

1. Create a query to display the employee name and salary for employee number 7566.

SELECT EName, Sal

FROM [EMP Design]

WHERE EmpNo ="7566";

| **Query1** | |
| --- | --- |
| **EName** | **Sal** |
| JONES | $3,100.00 |

1. Display the name and salary for all employees whose salary is not in the range of 1500 to 2850.

SELECT EName, Sal

FROM [EMP Design]

WHERE Sal NOT BETWEEN 1500 AND 2850;

| **Query1** | |
| --- | --- |
| **EName** | **Sal** |
| SMITH | $800.00 |
| WARD | $1,250.00 |
| JONES | $3,100.00 |
| MARTIN | $1,250.00 |
| SCOTT | $3,000.00 |
| KING | $5,000.00 |
| ADAMS | $1,100.00 |
| JAMES | $950.00 |
| FORD | $3,000.00 |
| MILLER | $1,300.00 |

1. Modify #7 to list name and salary of employees who earn more than $1500 and are in department 10 or 30. Label the columns Employee and Monthly Salary.

SELECT EName As Employee, Sal AS [Monthly Salary]

FROM [EMP Design]

WHERE Sal >1500 AND DepTNo ="10" OR Sal >1500 AND DepTNo ="30" ;

| **Query1** | |
| --- | --- |
| **Employee** | **Monthly Salary** |
| ALLEN | $1,600.00 |
| BLAKE | $2,850.00 |
| CLARK | $2,450.00 |
| KING | $5,000.00 |

1. Modify #8 to list name, salary and commission for all employees whose commission amount is greater than their salary increased by 10%.

SELECT EName, Sal, Comm

FROM [EMP Design]

WHERE Comm >Sal + (Sal \* 0.10) ;

| **Query1** | | |
| --- | --- | --- |
| **EName** | **Sal** | **Comm** |
| MARTIN | $1,250.00 | $1,400.00 |

1. Display the name and hire date of every employee hired in 1982. Use LIKE.

SELECT [EMP Design].EName , [EMP Design].HireDate

FROM [EMP Design]

WHERE [EMP Design].HireDate LIKE '\*82';

| **Query1** | |
| --- | --- |
| **EName** | **HireDate** |
| SCOTT | 09-Dec-82 |
| MILLER | 23-Jan-82 |

1. Display the name and title of all employees who do not have a manager. Use the IsNull(var) function.

SELECT [EMP Design].EName, [EMP Design].Job

FROM [EMP Design]

WHERE ((([EMP Design].Job)=IsNull("Mgr")));

1. Display the names of all employees where the third letter of their name is A. Use LIKE and the ?.

SELECT [EMP Design].EName

FROM [EMP Design]

WHERE Ename LIKE '??A\*'

| **Query1** |
| --- |
| **EName** |
| BLAKE |
| CLARK |
| ADAMS |

**DISPLAYING DATA FROM MULTIPLE TABLES**

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

SELECT [EMP Design].EName , [EMP Design].DeptNo, DEPT.Dname

FROM [EMP Design], DEPT

WHERE [EMP Design].DeptNo = DEPT.DeptNo;

| **Query1** | | |
| --- | --- | --- |
| **EName** | **DeptNo** | **Dname** |
| CLARK | 10 | ACCOUNTING |
| KING | 10 | ACCOUNTING |
| MILLER | 10 | ACCOUNTING |
| SMITH | 20 | RESEARCH |
| JONES | 20 | RESEARCH |
| SCOTT | 20 | RESEARCH |
| ADAMS | 20 | RESEARCH |
| FORD | 20 | RESEARCH |
| ALLEN | 30 | SALES |
| WARD | 30 | SALES |
| MARTIN | 30 | SALES |
| BLAKE | 30 | SALES |
| TURNER | 30 | SALES |
| JAMES | 30 | SALES |

1. Create a unique listing of all jobs and locations that are in department 30.

SELECT DISTINCT [EMP Design].Job , DEPT.Loc

FROM [EMP Design], DEPT

WHERE [EMP Design].Deptno = DEPT.Deptno AND DEPT.Deptno = "30";

| **Query1** | |
| --- | --- |
| **Job** | **Loc** |
| CLERK | CHICAGO |
| MANAGER | CHICAGO |
| SALESMAN | CHICAGO |

1. Display the employee name, department name, and location of all employees who earn a commission.

SELECT [EMP Design].EName , DEPT.Dname, DEPT.Loc

FROM [EMP Design], DEPT

WHERE [EMP Design].Deptno = DEPT.Deptno AND [EMP Design].Comm > 0 ;

| **Query1** | | |
| --- | --- | --- |
| **EName** | **Dname** | **Loc** |
| ALLEN | SALES | CHICAGO |
| WARD | SALES | CHICAGO |
| MARTIN | SALES | CHICAGO |

**AGGREGATING DATA AND GROUP FUNCTIONS**

1. Display the highest, lowest, sum and average of all employees.

SELECT Max(Sal) AS Highest, Min(Sal) AS Lowest, Sum(Sal) As Sum, Avg(Sal) AS Average

FROM [EMP Design];

| **Query1** | | | |
| --- | --- | --- | --- |
| **Highest** | **Lowest** | **Sum** | **Average** |
| $5,000.00 | $800.00 | $29,150.00 | $2,082.14 |

1. Modify #20 to produce one line for each job type.

SELECT Job, Max(Sal) AS Highest, Min(Sal) AS Lowest, Sum(Sal) As Sum, Avg(Sal) AS Average

FROM [EMP Design]

GROUP BY Job;

| **Query1** | | | | |
| --- | --- | --- | --- | --- |
| **Job** | **Highest** | **Lowest** | **Sum** | **Average** |
| ANALYST | $3,000.00 | $3,000.00 | $6,000.00 | $3,000.00 |
| CLERK | $1,300.00 | $800.00 | $4,150.00 | $1,037.50 |
| MANAGER | $3,100.00 | $2,450.00 | $8,400.00 | $2,800.00 |
| PRESIDENT | $5,000.00 | $5,000.00 | $5,000.00 | $5,000.00 |
| SALESMAN | $1,600.00 | $1,250.00 | $5,600.00 | $1,400.00 |