BASIC SQL

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Emp table data

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK	7902	17-Dec-80	800		20
7499	ALLEN	SALESMAN	7698	20-Feb-81	1600	300	30
7521	WARD	SALESMAN	7698	22-Feb-81	1250	500	30
7566	JONES	MANAGER	7839	02-Apr-81	2975		20
7654	MARTIN	SALESMAN	7698	28-Sep-81	1250	1400	30
7698	BLAKE	MANAGER	7839	01-May-81	2850		30
7782	CLARK	MANAGER	7839	09-Jun-81	2450		10
7788	SCOTT	ANALYST	7566	09-Dec-82	3000		20
7839	KING	PRESIDENT		17-Nov-81	5000		10
7844	TURNER	SALESMAN	7698	08-Sep-81	1500	0	30
7876	ADAMS	CLERK	7788	12-Jan-83	1100		20
7900	JAMES	CLERK	7698	03-Dec-81	950		30
7902	FORD	ANALYST	7566	03-Dec-81	3000		20
7934	MILLER	CLERK	7782	23-Jan-82	1300		10

Dept table data

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

Q1. WRITE A QUERY TO DISPLAY EMPLOYEE NAME, JOB, HIREDATE AND EMPLOYEE NUMBER FOR EACH EMPLOYEE WITH EMPLOYEE NUMBER APPEARING FIRST SORTED IN ASCENDING ORDER AND HIRE DATE BETWEEN x AND y

SQL> SELECT EMPNO,ENAME,JOB,HIREDATE FROM EMP where HIREDATE BETWEEN '17-DEC-80' AND '28-SEP-81' ORDER BY(EMPNO);

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
7844	TURNER	SALESMAN	08-SEP-81

8 rows selected.

Q2. WRITE A QUERY TO DISPLAY UNIQUE JOBS FROM THE EMPLOYEE TABLE WITH SALARY BETWEEN x AND y.

SQL> SELECT DISTINCT(JOB) FROM EMP where SAL BETWEEN 1500 AND 4000;

JOB

ANALYST
MANAGER
SALESMAN

Q3. WRITE A QUERY TO DISPLAY NAME CONCATENATED BY A JOB SEPARATED BY A COMMA.

```
SQL> SELECT ENAME ||','|| JOB FROM EMP;

ENAME||','||JOB
-------------------
SMITH,CLERK
ALLEN,SALESMAN
WARD,SALESMAN
JONES,MANAGER
MARTIN,SALESMAN
BLAKE,MANAGER
CLARK,MANAGER
SCOTT,ANALYST
KING,PRESIDENT
TURNER,SALESMAN
ADAMS,CLERK
```

```
ENAME||','||JOB
-------------------
JAMES,CLERK
FORD,ANALYST
MILLER,CLERK


14 rows selected.
```

Q4. WRITE A QUERY TO DISPLAY ALL DATA FROM EMPLOYEE TABLE. SEPARATE EACH COLUMN BY A COMMA AND NAME THE COLUMN THE_OUTPUT.

```
SQL> SELECT EMPNO ||','|| ENAME ||','|| JOB ||','|| MGR ||','|| HIREDATE ||','|| SAL ||','|| COMM ||','|| DEPTNO ||','||
DOJ "THE_OUTPUT" FROM EMP;
```

```
THE_OUTPUT
--------------------------------------------------------------------------------
7369,SMITH,CLERK,7902,17-DEC-80,800,,20,
7499,ALLEN,SALESMAN,7698,20-FEB-81,1600,300,30,
7521,WARD,SALESMAN,7698,22-FEB-81,1250,500,30,
7566,JONES,MANAGER,7839,02-APR-81,2975,,20,
7654,MARTIN,SALESMAN,7698,28-SEP-81,1250,1400,30,
7698,BLAKE,MANAGER,7839,01-MAY-81,2850,,30,
7782,CLARK,MANAGER,7839,09-JUN-81,2450,,10,
7788,SCOTT,ANALYST,7566,19-APR-87,3000,,20,
7839,KING,PRESIDENT,,17-NOV-81,5000,,10,
7844,TURNER,SALESMAN,7698,08-SEP-81,1500,0,30,
7876,ADAMS,CLERK,7788,23-MAY-87,1100,,20,
7900,JAMES,CLERK,7698,03-DEC-81,950,,30,
7902,FORD,ANALYST,7566,03-DEC-81,3000,,20,
7934,MILLER,CLERK,7782,23-JAN-82,1300,,10,


14 rows selected.
```

Q5. WRITE A QUERY TO DISPLAY NAME AND SALARY OF EMPLOYEES EARNING MORE THAN $2850.

```
SQL> SELECT ENAME,SAL FROM EMP where SAL>2850;

ENAME           SAL
----------      ----------
JONES          2975
SCOTT          3000
KING           5000
FORD           3000
```

Q6. WRITE A QUERY TO DISPLAY EMPLOYEE NAME AND DEPARTMENT NUMBER FOR EMPLOYEE NUMBER 7900.

```
SQL> SELECT ENAME,DEPTNO FROM EMP where EMPNO=7900;

ENAME        DEPTNO
----------   ----------
JAMES          30
```

Q7. WRITE A QUERY TO DISPLAY NAME AND SALARY FOR ALL EMPLOYEES WHOSE SALARY IS NOT IN THE RANGE OF $1500 AND $2850.

SQL> SELECT ENAME,SAL FROM EMP where SAL NOT BETWEEN 1500 AND 2850;

ENAME	SAL
SMITH	800
WARD	1250
JONES	2975
MARTIN	1250
SCOTT	3000
KING	5000
ADAMS	1100
JAMES	950
FORD	3000
MILLER	1300

10 rows selected.

Q8. WRITE A QUERY TO DISPLAY THE EMPLOYEE NAME, JOB, HIREDATE OF EMPLOYEES HIRED BETWEEN FEB 20,1981 AND MAY 1, 1981. ORDER THE QUERY IN ASCENDING ORDER OF START DATE.

```
SQL> SELECT ENAME,JOB,HIREDATE FROM EMP where HIREDATE BETWEEN '20-FEB-81' AND '01-MAY-81' ORDER BY(DOJ);

ENAME      JOB       HIREDATE
---------- --------- ---------
ALLEN      SALESMAN  20-FEB-81
WARD       SALESMAN  22-FEB-81
JONES      MANAGER   02-APR-81
BLAKE      MANAGER   01-MAY-81
```

Q9. WRITE A QUERY TO DISPLAY EMPLOYEE'S NAME AND DEPARTMENT NUMBER OF ALL EMPLOYEES IN DEPARTMENT 10 AND 30 IN ALPHABETICAL ORDER BY NAME

```
SQL> SELECT ENAME,DEPTNO FROM EMP where (DEPTNO=10 OR DEPTNO=30) ORDER BY(ENAME);

ENAME         DEPTNO
---------- ----------
ALLEN             30
BLAKE             30
```

```
CLARK            10
JAMES            30
KING             10
MARTIN           30
MILLER           10
TURNER           30
WARD             30

9 rows selected.
```

Q10. WRITE A QUERY TO DISPLAY THE NAME AND SALARY OF EMPLOYEES WHO EARNED MORE THAN $1500 AND ARE IN DEPARTMENT 10 OR 30

```
SQL> SELECT ENAME,SAL FROM EMP where SAL>1500 AND (DEPTNO=10 OR DEPTNO=30);
ENAME          SAL
---------      ----------
ALLEN          1600
BLAKE          2850
CLARK          2450
KING           5000
```

Q11. WRITE A QUERY TO DISPLAY NAME AND HIREDATE OF EVERY EMPLOYEE WHO WAS HIRED IN 1981.

```
SQL> SELECT ENAME,HIREDATE FROM EMP where TO_CHAR(HIREDATE,'YY')='81';

ENAME      HIREDATE
----------       ---------
ALLEN      20-FEB-81
WARD       22-FEB-81
JONES      02-APR-81
MARTIN     28-SEP-81
BLAKE      01-MAY-81
CLARK      09-JUN-81
KING       17-NOV-81
TURNER     08-SEP-81
JAMES      03-DEC-81
FORD       03-DEC-81

10 rows selected.
```

Q12. WRITE A QUERY TO DISPLAY NAME AND JOB OF ALL EMPLOYEES WHO DO NOT HAVE A MANAGER

SQL> SELECT ENAME,JOB FROM EMP where MGR IS NULL;

ENAME JOB
---------- ---------
KING PRESIDENT

Q13. WRITE A QUERY TO DISPLAY THE NAME,SALARY AND COMMISSION FOR ALL EMPLOYEES WHO EARN COMMISSION. SORT THE DATA IN DESCENDING ORDER OF SALARY AND COMMISSION

SQL> SELECT ENAME,SAL,COMM FROM EMP where COMM>0 ORDER BY(SAL) DESC;

ENAME SAL COMM
---------- ---------- ----------
ALLEN 1600 300
WARD 1250 500

```
MARTIN          1250       1400
```

```
SQL> SELECT ENAME,SAL,COMM FROM EMP where COMM>0 ORDER BY(COMM) DESC;
```

```
ENAME            SAL       COMM
---------- ---------- ----------
MARTIN          1250       1400
WARD            1250        500
ALLEN           1600        300
```

Q14. WRITE A QUERY TO DISPLAY THE NAMES OF ALL EMPLOYEES WHERE THE THIRD LETTER OF THEIR NAME IS A

```
SQL> SELECT ENAME FROM EMP where ENAME LIKE '__A%';
```

```
ENAME
----------
BLAKE
CLARK
ADAMS
```

Q15. WRITE A QUERY TO DISPLAY THE NAMES OF ALL EMPLOYEES THAT HAVE 2 R's OR A's IN THEIR NAME AND ARE IN DEPARTMENT 30 OR THIER MANAGER IS 7788

```
SQL> SELECT ENAME FROM EMP where (ENAME LIKE '%R%R' OR ENAME LIKE '%A%A') AND (DEPTNO=30 OR MGR=7788);

ENAME
----------
TURNER
```

Q16. WRITE A QUERY TO DISPLAY THE NAME,JOB,SALARY OF ALL EMPLOYEES WHOSE JOB IS CLERK OR ANALYST AND THEIR SALARY ARE NOT EQUAL TO 1000,3000 OR 5000.

```
SQL> SELECT ENAME,JOB,SAL FROM EMP where (JOB='CLERK' OR JOB='ANALYST') AND (SAL NOT IN (1000,3000,5
000));

ENAME      JOB              SAL
---------- --------- ----------
SMITH      CLERK             800
ADAMS      CLERK            1100
JAMES      CLERK             950
MILLER     CLERK            1300
```

Q17. WRITE A QUERY TO DISPLAY NAME, SALARY AND COMMISSION FOR ALL EMPLOYEES WHOSE COMMISSION AMOUNT IS GREATER THAN THEIR SALARY INCREASED BY 5%.

```
SQL> SELECT ENAME,SAL,COMM FROM EMP where COMM > (SAL+((SAL*5)/100));

ENAME           SAL       COMM
---------- ----------           ----------
MARTIN          1250       1400
```

Q18. WRITE A QUERY TO DISPLAY THE CURRENT DATE.

```
SQL> SELECT SYSDATE FROM DUAL;

SYSDATE
---------
16-Apr-20
```

Q19. WRITE A QUERY TO DISPLAY THE EMPLOYEE NUMBER, NAME, SALARY AND THE SALARY INCREASED BY 15% EXPRESSED AS A WHOLE NUMBER.

```
SQL> SELECT EMPNO,ENAME,SAL,round(SAL+(.15*SAL)) "INCREASED SALARY" FROM EMP;

     EMPNO ENAME      SAL          INCREASED SALARY
---------- ---------- ----------   ----------------
      7369 SMITH         800           920
      7499 ALLEN        1600          1840
      7521 WARD         1250          1438
      7566 JONES        2975          3421
      7654 MARTIN       1250          1438
      7698 BLAKE        2850          3278
      7782 CLARK        2450          2818
      7788 SCOTT        3000          3450
      7839 KING         5000          5750
      7844 TURNER       1500          1725
      7876 ADAMS        1100          1265
```

.

EMPNO	ENAME	SAL	INCREASED SALARY
7900	JAMES	950	1093
7902	FORD	3000	3450
7934	MILLER	1300	1495

14 rows selected

Q20. Write a query to display the name, department name and department number for all employees.

SQL> select emp.ename,emp.deptno,dept.dname from emp,dept where emp.deptno=dept.deptno;

ENAME	DEPTNO	DNAME
SMITH	20	research
ALLEN	30	sales
WARD	30	sales
JONES	20	research

.

MARTIN 30 sales
BLAKE 30 sales
KING 10 accounting
TURNER 30 sales
ADAMS 20 research
CLARK 10 accounting

10 rows selected

Q21. Write a query to display unique listing of all jobs that are in department 30.

SQL> select distinct job from emp where deptno = 30;

JOB

ANALYST
CLERK
MANAGER
SALESMAN

Q22. Write a query to display the name, job, department number and department name for all employees who work at location 'DALLAS'.

SQL> select emp.ename,emp.job,emp.deptno,dept.dname from emp,dept where (emp.deptno=dept.deptno and dept.loc='dallas');

ENAME	JOB	DEPTNO	DNAME
SMITH	CLERK	20	research
JONES	MANAGER	20	research
SCOTT	ANALYST	20	research
ADAMS	CLERK	20	research
FORD	ANALYST	20	research