CSE2007 DBMS LAB

SLOT: L39+L40
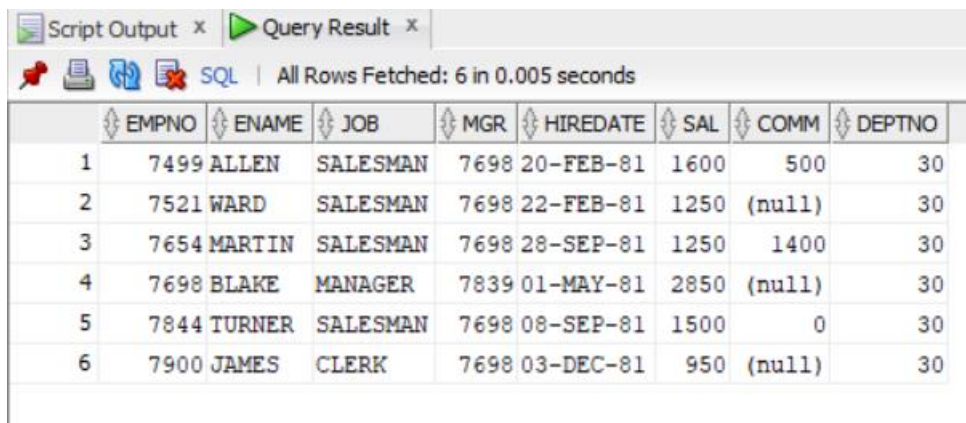**NAME - AMAN SAHU**
REG. NO – 22BCE7224
EXPERIMENT NO.-4

1. Find employees who earn more than every employee in dept 30?*

Code-

SELECT * FROM emp WHERE DEPTNO=30;

2. Find the job with the highest average salary?

Code-

SELECT JOB FROM emp WHERE SAL=(SELECT MAX(SAL) FROM emp);

3. Display the name,job,hiredate for employees whose salary is greater than the highest salary in the sales department?

Code-

SELECT ENAME,JOB,HIREDATE FROM emp WHERE SAL>(SELECT MAX(SAL) FROM emp WHERE DEPTNO=30);

	ENAME	JOB	HIREDATE
1	JONES	MANAGER	02-APR-81
2	SCOTT	ANALYST	19-APR-87
3	KING	PRESIDENT	17-NOV-81
4	FORD	ANALYST	03-DEC-81

4. Copy all information on dept10 into the D10 table?*

CREATE TABLE D10 AS SELECT * FROM emp WHERE DEPTNO = 10;

SELECT * FROM D10;

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7782	CLARK	MANAGER	7839	09-JUN-81	2450	(null)	10
2	7839	KING	PRESIDENT	(null)	17-NOV-81	5000	(null)	10
3	7934	MILLER	CLERK	7782	23-JAN-82	1300	(null)	10

5. Delete all information on dept10 from emp table?

Code-

DELETE FROM emp WHERE DEPTNO = 10;

SELECT * FROM emp;

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7369	SMITH	CLERK	7902	17-DEC-80	800	300	20
2	7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	500	30
3	7521	WARD	SALESMAN	7698	22-FEB-81	1250	(null)	30
4	7566	JONES	MANAGER	7839	02-APR-81	2975	(null)	20
5	7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30
6	7698	BLAKE	MANAGER	7839	01-MAY-81	2850	(null)	30
7	7788	SCOTT	ANALYST	7566	19-APR-87	3000	(null)	20
8	7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0	30
9	7876	ADAMS	CLERK	7788	23-MAY-87	1100	(null)	20
10	7900	JAMES	CLERK	7698	03-DEC-81	950	(null)	30
11	7902	FORD	ANALYST	7566	03-DEC-81	3000	(null)	20

6. Delete rows from dept table of those dept numbers do not have matching rows in the emp table?

Code-

DELETE FROM dept WHERE deptno NOT IN (SELECT deptno FROM emp);

SELECT * FROM dept;

	DEPTNO	DNAME	LOC
1	10	ACCOUNTING	NEW YORK
2	20	RESEARCH	DALLAS
3	30	SALES	CHICAGO

7. List the emp name & salary increased by 15% and expressed as whole no of dollars?

Code-

SELECT ENAME, ROUND(SAL * 1.15) AS INCREASED_SALARY FROM emp;

	ENAME	INCREASED_SALARY
1	SMITH	920
2	ALLEN	1840
3	WARD	1438
4	JONES	3421
5	MARTIN	1438
6	BLAKE	3278
7	CLARK	2818
8	SCOTT	3450
9	KING	5750
10	TURNER	1725
11	ADAMS	1265
12	JAMES	1093
13	FORD	3450
14	MILLER	1495

8. Display each employee name with hiredate & review date. Assume review date is one year after hiredate. Order output in assending review date order?

Code-

SELECT ENAME, HIREDATE, HIREDATE + INTERVAL '1' YEAR AS REVIEW_DATE

FROM emp

ORDER BY REVIEW_DATE;

	ENAME	HIREDATE	REVIEW_DATE
1	SMITH	17-DEC-80	17-DEC-81
2	ALLEN	20-FEB-81	20-FEB-82
3	WARD	22-FEB-81	22-FEB-82
4	JONES	02-APR-81	02-APR-82
5	BLAKE	01-MAY-81	01-MAY-82
6	CLARK	09-JUN-81	09-JUN-82
7	TURNER	08-SEP-81	08-SEP-82
8	MARTIN	28-SEP-81	28-SEP-82
9	KING	17-NOV-81	17-NOV-82
10	JAMES	03-DEC-81	03-DEC-82
11	FORD	03-DEC-81	03-DEC-82
12	MILLER	23-JAN-82	23-JAN-83
13	SCOTT	19-APR-87	19-APR-88
14	ADAMS	23-MAY-87	23-MAY-88

9. Write query which will return the day of the week,for any date entered in the format DD.MM.YY?

Code-

SELECT TO_CHAR(TO_DATE('15.02.22', 'DD.MM.YY'), 'Day') AS DAY_OF_WEEK

FROM dual;

	DAY_OF_WEEK
1	Tuesday

10. List the min & max salary for each job type?*

Code-

SELECT JOB, MIN(SAL) AS MIN_SALARY, MAX(SAL) AS MAX_SALARY

FROM emp

GROUP BY JOB;

	JOB	MIN_SALARY	MAX_SALARY
1	CLERK	800	1300
2	SALESMAN	1250	1600
3	ANALYST	3000	3000
4	MANAGER	2450	2975
5	PRESIDENT	5000	5000

11. Find avg salary & avg total remunation for each job title. Remember salesman earn commision?

Code-

SELECT JOB, AVG(SAL) AS AVG_SALARY, AVG(SAL + NVL(COMM, 0)) AS AVG_TOTAL_REMUNERATION

FROM emp

GROUP BY JOB;

	JOB	AVG_SALARY	AVG_TOTAL_REMUNERATION
1	CLERK	1037.5	1112.5
2	SALESMAN	1400	1875
3	ANALYST	3000	3000
4	MANAGER	2758.333333333333333333333333333333333333	2758.333333333333333333333333333333333333
5	PRESIDENT	5000	5000

12. Find all dept's which have more than 3 employees?

Code-

SELECT DEPTNO

FROM emp

GROUP BY DEPTNO

HAVING COUNT(*) > 3;

	DEPTNO
1	30
2	20

13. List the employee name, job, salary, grade, dept name for every one in the company except clerks. Sort on salary displaying the highest salary first?

Code-

SELECT ENAME, JOB, SAL, dname

FROM emp

JOIN dept ON emp.DEPTNO = dept.DEPTNO

WHERE JOB <> 'CLERK'

ORDER BY SAL DESC;

	ENAME	JOB	SAL	DNAME
1	KING	PRESIDENT	5000	ACCOUNTING
2	SCOTT	ANALYST	3000	RESEARCH
3	FORD	ANALYST	3000	RESEARCH
4	JONES	MANAGER	2975	RESEARCH
5	BLAKE	MANAGER	2850	SALES
6	CLARK	MANAGER	2450	ACCOUNTING
7	ALLEN	SALESMAN	1600	SALES
8	TURNER	SALESMAN	1500	SALES
9	WARD	SALESMAN	1250	SALES
10	MARTIN	SALESMAN	1250	SALES

14. List the ename,job,annual salary,deptno,dname,grade of employees who earn $36000 a year or who are clerks?

Code-

SELECT ENAME, JOB, SAL * 12 AS ANNUAL_SALARY, emp.DEPTNO, dname

FROM emp

JOIN dept ON emp.DEPTNO = dept.DEPTNO

WHERE SAL = 3000 OR JOB = 'CLERK';

	ENAME	JOB	ANNUAL_SALARY	DEPTNO	DNAME
1	SMITH	CLERK	9600	20	RESEARCH
2	SCOTT	ANALYST	36000	20	RESEARCH
3	ADAMS	CLERK	13200	20	RESEARCH
4	JAMES	CLERK	11400	30	SALES
5	FORD	ANALYST	36000	20	RESEARCH
6	MILLER	CLERK	15600	10	ACCOUNTING

15. Show name,salary,deptno for any employee who earns a salary greater than the average for their dept. Sort in dept order?

Code-

SELECT ENAME, SAL, emp.deptno

FROM emp

WHERE SAL > (SELECT AVG(SAL) FROM emp,dept WHERE emp.deptno = dept.deptno)

ORDER BY emp.deptno;

	ENAME	SAL	DEPTNO
1	CLARK	2450	10
2	KING	5000	10
3	FORD	3000	20
4	SCOTT	3000	20
5	JONES	2975	20
6	BLAKE	2850	30

16. Find all employees whose dept is not in the dept table?

Code-

SELECT *

FROM emp

WHERE DEPTNO NOT IN (SELECT DEPTNO FROM dept);

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO

17. Who are the top 3 earners in the company. Display their name and salary?

Code-

SELECT ENAME, SAL

FROM emp

ORDER BY SAL DESC

FETCH FIRST 3 ROWS ONLY;

	ENAME	SAL
1	KING	5000
2	SCOTT	3000
3	FORD	3000

18. List employees with either the same job as jones or a salary greater than or equal to ford's, order by job and salary?

Code-

SELECT ENAME, JOB, SAL

FROM emp

WHERE JOB = (SELECT JOB FROM emp WHERE ENAME = 'JONES')

```
  OR SAL >= (SELECT SAL FROM emp WHERE ENAME = 'FORD')
```

ORDER BY JOB, SAL;

	ENAME	JOB	SAL
1	SCOTT	ANALYST	3000
2	FORD	ANALYST	3000
3	CLARK	MANAGER	2450
4	BLAKE	MANAGER	2850
5	JONES	MANAGER	2975
6	KING	PRESIDENT	5000

19. List employees in deptno 10 with the same job as anyone in the sales dept?

Code-

SELECT ENAME, JOB

FROM emp

WHERE DEPTNO = 10

   AND JOB IN (SELECT JOB FROM emp WHERE DEPTNO = (SELECT DEPTNO FROM dept WHERE DNAME = 'SALES'));

	ENAME	JOB
1	CLARK	MANAGER
2	MILLER	CLERK

20. List the employees having the same job as employees located in chicago?

Code-

SELECT ENAME, JOB

FROM emp

WHERE JOB IN (SELECT JOB FROM emp WHERE DEPTNO = (SELECT DEPTNO FROM dept WHERE DNAME = 'CHICAGO'));

ENAME	JOB	

21. List employee whose salary is equal to that of SCOTT or WARD?

Code-

SELECT ENAME, JOB, SAL

FROM emp

WHERE SAL = (SELECT SAL FROM emp WHERE ENAME IN ('SCOTT', 'WARD'));

22. Delete all employees with the same job as jones and jones should not be deleted?

Code-

DELETE FROM emp

WHERE JOB = (SELECT JOB FROM emp WHERE ENAME = 'JONES') AND ENAME <> 'JONES';

SELECT * FROM emp;

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7369	SMITH	CLERK	7902	17-DEC-80	800	300	20
2	7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	500	30
3	7521	WARD	SALESMAN	7698	22-FEB-81	1250	(null)	30
4	7566	JONES	MANAGER	7839	02-APR-81	2975	(null)	20
5	7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30
6	7788	SCOTT	ANALYST	7566	19-APR-87	3000	(null)	20
7	7839	KING	PRESIDENT	(null)	17-NOV-81	5000	(null)	10
8	7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0	30
9	7876	ADAMS	CLERK	7788	23-MAY-87	1100	(null)	20
10	7900	JAMES	CLERK	7698	03-DEC-81	950	(null)	30
11	7902	FORD	ANALYST	7566	03-DEC-81	3000	(null)	20
12	7934	MILLER	CLERK	7782	23-JAN-82	1300	(null)	10

23. Write a query to delete the Duplicate rows for Emp table?

Code-

DELETE FROM emp

WHERE ROWID NOT IN (SELECT MIN(ROWID) FROM emp GROUP BY EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO);

SELECT * FROM emp;

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7369	SMITH	CLERK	7902	17-DEC-80	800	300	20
2	7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	500	30
3	7521	WARD	SALESMAN	7698	22-FEB-81	1250	(null)	30
4	7566	JONES	MANAGER	7839	02-APR-81	2975	(null)	20
5	7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30
6	7698	BLAKE	MANAGER	7839	01-MAY-81	2850	(null)	30
7	7782	CLARK	MANAGER	7839	09-JUN-81	2450	(null)	10
8	7788	SCOTT	ANALYST	7566	19-APR-87	3000	(null)	20
9	7839	KING	PRESIDENT	(null)	17-NOV-81	5000	(null)	10
10	7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0	30
11	7876	ADAMS	CLERK	7788	23-MAY-87	1100	(null)	20
12	7900	JAMES	CLERK	7698	03-DEC-81	950	(null)	30
13	7902	FORD	ANALYST	7566	03-DEC-81	3000	(null)	20
14	7934	MILLER	CLERK	7782	23-JAN-82	1300	(null)	10

24. Write a query to display 5th row to 7th row of Emp Table?

Code-

SELECT *

FROM (SELECT e.*, ROWNUM rnum FROM emp e WHERE ROWNUM <= 7)

WHERE rnum >= 5;

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	RNUM
1	7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30	5
2	7698	BLAKE	MANAGER	7839	01-MAY-81	2850	(null)	30	6
3	7782	CLARK	MANAGER	7839	09-JUN-81	2450	(null)	10	7

25. Write a query to display the 2nd Max Salary earning employee?

Code-

SELECT *

FROM (SELECT ENAME, SAL, RANK() OVER (ORDER BY SAL DESC) AS salary_rank

    FROM emp)

WHERE salary_rank = 2;

	ENAME	SAL	SALARY_RANK
1	SCOTT	3000	2
2	FORD	3000	2

	ENAME	SAL	SALARY_RANK
1	SCOTT	3000	2
2	FORD	3000	2