DBMS LAB

DATA BASE MANAGEMENT SYSTEM

ASSIGNMENT – 1

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ROLL NO:- 002211001132

CLASS - 2ND YEAR 1ST SEM

>>CREATING TABLE FOR EMPLOYEES

```
CREATE TABLE EMP
 (
      EMPNO   NUMBER(4) NOT NULL,
      ENAME VARCHAR2(10),
      JOB VARCHAR2(9),
      MGR NUMBER(4),
      HIREDATE DATE,
      SAL NUMBER(7,2),
      COMM NUMBER(7,2),
      DEPTNO NUMBER(2),
      PHONENO NUMBER(10),
      ADDRESS VARCHAR2(20)
 );
```

>> INSERTING DATA

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

>>CREATING TABLE FOR DEPARTMENT

```
create table dept(
    deptno number(2,0),
    dname  varchar2(14),
    loc    varchar2(13),
    constraint pk_dept primary key (deptno)
 );
```

>>INSERTING DATA

```
 insert into dept values(10, 'ACCOUNTING', 'NEW YORK');
 insert into dept values(20, 'RESEARCH', 'DALLAS');
 insert into dept values(30, 'SALES', 'CHICAGO');
 insert into dept values(40, 'OPERATIONS', 'BOSTON');
```

>>**CREATING TABLE FOR SALGRADE**

```
create table salgrade(
  grade number,
  losal number,
  hisal numbers
);
```

>>**INSERTING DATA**

```
insert into salgrade values (1, 700, 1200);
insert into salgrade values (2, 1201, 1400);
insert into salgrade values (3, 1401, 2000);
insert into salgrade values (4, 2001, 3000);
insert into salgrade values (5, 3001, 9999);
```

1. Show the details of all employees.

```
SELECT *
FROM emp;
```

	A	B	C	D	E	F	G	H	I	J
1	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	PHONENC	ADDRESS
2	7369	SMITH	CLERK	7902	17-Dec-80	800	-	20	-	-
3	7369	SMITH	CLERK	7902	17-Dec-80	800	-	20	-	-
4	7499	ALLEN	SALESMAI	7698	20-Feb-81	1600	300	30	-	-
5	7521	WARD	SALESMAI	7698	22-Feb-81	1250	500	30	-	-
6	7566	JONES	MANAGEF	7839	02-Apr-81	2975	-	20	-	-
7	7654	MARTIN	SALESMAI	7698	28-Sep-81	1250	1400	30	-	-
8	7698	BLAKE	MANAGEF	7839	01-May-81	2850	-	30	-	-
9	7782	CLARK	MANAGEF	7839	09-Jun-81	2450	-	10	-	-
10	7788	SCOTT	ANALYST	7566	19-Apr-87	3000	-	20	-	-
11	7839	KING	PRESIDEN	-	17-Nov-81	5000	-	10	-	-
12	7844	TURNER	SALESMAI	7698	08-Sep-81	1500	0	30	-	-
13	7876	ADAMS	CLERK	7788	23-May-87	1100	-	20	-	-
14	7900	JAMES	CLERK	7698	03-Dec-81	950	-	30	-	-
15	7902	FORD	ANALYST	7566	03-Dec-81	3000	-	20	-	-
16	7934	MILLER	CLERK	7782	23-Jan-82	1300	-	10	-	-

2. Show the department no. and name of all departments.

```
SELECT deptno, dname
FROM dept;
```

DEPTNO	DNAME
10	ACCOUNTING
20	RESEARCH
30	SALES
40	OPERATIONS

3. Display the employee id, name and department no of all employees whose department no is 20.

```
SELECT empno, ename, deptno
FROM emp
WHERE deptno = 20;
```

EMPNO	ENAME	DEPTNO
7369	SMITH	20
7369	SMITH	20
7566	JONES	20
7788	SCOTT	20
7876	ADAMS	20
7902	FORD	20

4. Display the details of all employees where department no should be in descending order.

```
SELECT *
FROM emp
ORDER BY deptno DESC;
```

	A	B	C	D	E	F	G	H	I	J
1	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	PHONENC	ADDRESS
2	7499	ALLEN	SALESMAI	7698	20-Feb-81	1600	300	30	-	-
3	7844	TURNER	SALESMAI	7698	08-Sep-81	1500	0	30	-	-
4	7698	BLAKE	MANAGEF	7839	01-May-81	2850	-	30	-	-
5	7521	WARD	SALESMAI	7698	22-Feb-81	1250	500	30	-	-
6	7900	JAMES	CLERK	7698	03-Dec-81	950	-	30	-	-
7	7654	MARTIN	SALESMAI	7698	28-Sep-81	1250	1400	30	-	-
8	7788	SCOTT	ANALYST	7566	19-Apr-87	3000	-	20	-	-
9	7566	JONES	MANAGEF	7839	02-Apr-81	2975	-	20	-	-
10	7369	SMITH	CLERK	7902	17-Dec-80	800	-	20	-	-
11	7369	SMITH	CLERK	7902	17-Dec-80	800	-	20	-	-
12	7902	FORD	ANALYST	7566	03-Dec-81	3000	-	20	-	-
13	7876	ADAMS	CLERK	7788	23-May-87	1100	-	20	-	-
14	7934	MILLER	CLERK	7782	23-Jan-82	1300	-	10	-	-
15	7782	CLARK	MANAGEF	7839	09-Jun-81	2450	-	10	-	-
16	7839	KING	PRESIDEN	-	17-Nov-81	5000	-	10	-	-

5. Show all available jobs in the employee table.

```
12 v SELECT DISTINCT job
13   FROM emp;
```

JOB
CLERK
SALESMAN
ANALYST
MANAGER
PRESIDENT

6. Show the name, Annual Salary and department no of employees who works as a clerk in department 20.

```
1 v SELECT ename, sal * 12 AS annual_salary, deptno
2   FROM emp
3   WHERE job = 'CLERK' AND deptno = 20;
```

ENAME	ANNUAL_SALARY	DEPTNO
SMITH	9600	20
SMITH	9600	20
ADAMS	13200	20

7. Show the name and HIRED date of those employee whose name start with ‘S’ or second character is ‘C’.

```
5  SELECT ename, hiredate
6   FROM emp
7   WHERE ename LIKE 'S%' OR ename LIKE '_C%';
```

```
3 rows selected.
```

ENAME	HIREDATE
SMITH	17-DEC-80
SMITH	17-DEC-80
SCOTT	19-APR-87

8. Show the name, hire date and salary of those employee who are not a manager.

```
9  SELECT ename, hiredate, sal
10  FROM emp
11  WHERE job != 'MANAGER';
```

	A	B	C
1	UPPER(EN	LENGTH(ENAME)	
2	SMITH	5	
3	SMITH	5	
4	ALLEN	5	
5	WARD	4	
6	JONES	5	
7	MARTIN	6	
8	BLAKE	5	
9	CLARK	5	
10	SCOTT	5	
11	KING	4	
12	TURNER	6	
13	ADAMS	5	
14	JAMES	5	
15	FORD	4	
16	MILLER	6	

9. Display all employee names in title case and length of the name.

```
SELECT UPPER(ename), LENGTH(ename)
FROM emp;
```

	A	B	C
1	UPPER(EN	LENGTH(ENAME)	
2	SMITH	5	
3	SMITH	5	
4	ALLEN	5	
5	WARD	4	
6	JONES	5	
7	MARTIN	6	
8	BLAKE	5	
9	CLARK	5	
10	SCOTT	5	
11	KING	4	
12	TURNER	6	
13	ADAMS	5	
14	JAMES	5	
15	FORD	4	
16	MILLER	6	

10. Display the name of employee who gets the salary between 4000 to 6000.

```
SELECT ename
FROM emp
WHERE sal BETWEEN 4000 AND 6000;
```

ENAME
KING