

Class: B.Sc. IT semester-I Div-  
Subject: DBMS  
Practical Assignment Aim:5 (SQL DDL & DML STATEMENT)  
Date of Practical Assignment:

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1. CREATE FOLLOWING TABLES: BIT\_dept

```
CREATE TABLE BIT_dept(  
DEPTNO NUMBER (3),  
DNAME VARCHAR2 (10),  
LOC VARCHAR2 (30)  
);
```

\* CREATE FOLLOWING TABLES: BIT\_emp

```
CREATE TABLE BIT_emp(  
EMPNO NUMBER (4),  
ENAME VARCHAR2 (7),  
JOB VARCHAR2 (12)),  
HIREDATE DATE,  
MGR NUMBER (5),  
SAL NUMBER (5),  
COMM NUMBER (7),  
DEPTNO NUMBER (3)  
);
```

1. Add check constraint on JOB

```
field(CLERK, SALESMAN, MANAGER, ANALYST, PRESIDENT )  
ALTER TABLE BIT_emp ADD CHECK (JOB  
IN ('CLERK', 'CLARK', 'SALESMAN', 'ANALYST', 'PRESIDENT', 'MANAGER'));
```

3. Insert records as per given record format.

```
INSERT INTO BIT_emp  
VALUES (7369, 'SMITH', 'CLERK', 'DEC/17/1980', 7902, 800, NULL, 20);
```

```
INSERT INTO BIT_emp  
VALUES (7499, 'ALLEN', 'SALESEMAN', 'FEB/20/1981', 7698, 1600, 300, 30);
```

```
INSERT INTO BIT_emp  
VALUES (7521, 'WARD', 'SALESEMAN', 'FEB/22/1981', 7698, 1250, 500, 30);
```

```
INSERT INTO BIT_emp  
VALUES (7566, 'JONES', 'MANAGER', 'APR/02/1981', 7839, 2975, NULL, 20);
```

```
INSERT INTO BIT_emp  
VALUES (7654, 'MARTIN', 'SALESEMAN', 'SEP/28/1981', 7698, 1512, 1400, 30);
```

```
INSERT INTO BIT_emp  
VALUES (7698, 'BLAKE', 'MANAGER', 'MAY/01/1981', 7839, 2850, NULL, 30);
```

```
INSERT INTO BIT_emp  
VALUES (7782, 'CLARK', 'MANAGER', 'JUN/09/1981', 7839, 2450, NULL, 10)
```

```
INSERT INTO BIT_emp  
VALUES (7788, 'SCOTT', 'ANALYST', 'APR/19/1987', 7566, 3000, NULL, 20)
```

```
INSERT INTO BIT_emp  
VALUES (7839, 'KING', 'PRESEDENT', 'NOV/17/1981', NULL, 5000, NULL, 10)
```

```
INSERT INTO BIT_emp
VALUES (7844,'TURNER','SALESMAN','SEP/08/1981',7698,1500,0,30);
```

```
INSERT INTO BIT_emp
VALUES (7876,'ADAMA','CLERK','MAY/23/1987',7788,1100,NULL,20)
```

```
INSERT INTO BIT_emp
VALUES (7900,'JAMES','CLERK','DEC/03/1981',7698,950,NULL,30)
```

```
INSERT INTO BIT_emp
VALUES (7902,'FORD','ANALYST','DEC/03/1981',7566,3000,NULL,20)
```

```
INSERT INTO BIT_emp
VALUES (7934,'MILLER','CLERK','JAN/23/1982',7782,1300,NULL,10)
```

1.Insert records as per given record format.

```
INSERT INTO BIT_dept
VALUES (10,'ACCOUNTING','NEW YORK');
```

```
INSERT INTO BIT_dept
VALUES (20,'RESEARCH','DALLAS');
```

```
INSERT INTO BIT_dept
VALUES (30,'SALES','CHICAGO');
```

```
INSERT INTO BIT_dept
VALUES (40,'OPERATIONS','BOSTON');
```

1.Display all records of employee table.

```
select * from BIT_emp
EMPNO ENAME JOB HIREDATE MGR SAL COMM DEPTNO
7499 ALLEN SALESMAN 02/20/1981 76998 1600 300 30
7521 WARD SALESMAN 02/22/1981 7698 1250 500 30
7566 JONES MANAGER 04/02/1981 7839 2975 - 20
7654 MARTIN SALESMAN 09/28/1981 7698 1512 1400 30
7698 BLAKE MANAGER 05/01/1981 7839 2850 - 30
7782 CLARK MANAGER 06/09/1981 7839 2450 - 10
7788 SCOTT ANALYST 04/19/1987 7566 3000 - 20
7839 KING PRESIDENT 11/17/1981 - 5000 - 10
7902 FORD ANALYST 12/03/1981 7566 3000 - 20
7934 MILLER CLARK 01/23/1982 7782 1300 - 10
7876 ADAMA CLERK 05/23/1987 7788 1100 - 20
7844 TURNER SALESMAN 09/08/1981 7698 1500 0 30
7900 JAMES CLARK 12/03/1981 7698 950 - 30
```

1.Change field size as 30 for employee name

```
ALTER TABLE BIT_emp MODIFY ENAME VARCHAR2(30);
```

1.Add new column "email" of department as varchar on Department table.

```
ALTER TABLE BIT_dept ADD EMAIL VARCHAR(200);
```

1.Display all records whose employee job is not CLERK

```
SELECT * FROM BIT_emp WHERE JOB NOT IN ('CLERK');
EMPNO ENAME JOB HIREDATE MGR SAL COMM DEPTNO
```

|      |        |           |            |       |      |      |    |
|------|--------|-----------|------------|-------|------|------|----|
| 7499 | ALLEN  | SALESMAN  | 02/20/1981 | 76998 | 1600 | 300  | 30 |
| 7521 | WARD   | SALESMAN  | 02/22/1981 | 7698  | 1250 | 500  | 30 |
| 7566 | JONES  | MANAGER   | 04/02/1981 | 7839  | 2975 | -    | 20 |
| 7654 | MARTIN | SALESMAN  | 09/28/1981 | 7698  | 1512 | 1400 | 30 |
| 7698 | BLAKE  | MANAGER   | 05/01/1981 | 7839  | 2850 | -    | 30 |
| 7782 | CLARK  | MANAGER   | 06/09/1981 | 7839  | 2450 | -    | 10 |
| 7788 | SCOTT  | ANALYST   | 04/19/1987 | 7566  | 3000 | -    | 20 |
| 7839 | KING   | PRESIDENT | 11/17/1981 | -     | 5000 | -    | 10 |
| 7902 | FORD   | ANALYST   | 12/03/1981 | 7566  | 3000 | -    | 20 |
| 7934 | MILLER | CLARK     | 01/23/1982 | 7782  | 1300 | -    | 10 |
| 7844 | TURNER | SALESMAN  | 09/08/1981 | 7698  | 1500 | 0    | 30 |
| 7900 | JAMES  | CLARK     | 12/03/1981 | 7698  | 950  | -    | 30 |

1.Display all employee records whose department code is 10.

```
SELECT * FROM BIT_dept WHERE DEPTNO='10';
DEPTNO      DNAME LOC      EMAIL
10      ACCOUNTING NEW YORK      -
```

1.Display all employee name whose name stated with 'S' and salary not less than 1000.

```
SELECT * FROM BIT_emp WHERE (SAL>1000) AND ENAME LIKE 'S%';
EMPNO ENAME JOB      HIREDATE      MGR      SAL      COMM DEPTNO
7788  SCOTT ANALYST      04/19/1987  7566  3000  -      20
```

1. Retrieve department name from IT\_department whose location contains 'A' character.

```
SELECT DNAME FROM BIT_dept WHERE LOC LIKE '%A%'
DNAME
RESEARCH
SALES
```

1.Display employee name, job and hire date whose salary between 2000 to 3000.

```
SELECT ENAME, JOB, HIREDATE FROM BIT_emp WHERE SAL BETWEEN 2000 AND 3000;
ENAME JOB      HIREDATE
JONES MANAGER      04/02/1981
BLAKE MANAGER      05/01/1981
CLARK MANAGER      06/09/1981
SCOTT ANALYST      04/19/1987
FORD ANALYST      12/03/1981
```

1.Display employee number, employee name, hiredate, department number and salary whose mgr code is 7698 or 7566

```
SELECT EMPNO, ENAME, HIREDATE, DEPTNO, SAL FROM BIT_emp WHERE MGR =7698 OR
MGR=7566;
EMPNO ENAME HIREDATE      DEPTNO      SAL
7521  WARD  02/22/1981  30      1250
7654  MARTIN 09/28/1981  30      1512
7788  SCOTT 04/19/1987  20      3000
7902  FORD  12/03/1981  20      3000
7844  TURNER 09/08/1981  30      1500
7900  JAMES 12/03/1981  30      950
```

1.Increment the commission as 10% of salary for employee whose job is 'MANAGER'.

```
SELECT (SAL*10/100) AS COMM FROM BIT_emp WHERE JOB='MANAGER'
COMM
297.5
285
245
```

14.Delete employee information whose employee name is 'SMITH'.

```
DELETE FROM BIT_emp WHERE ENAME='SMITH';
```

15.Delete records of the table IT\_employee.

```
DELETE FROM BIT_emp;
```