Ex : 1   Table Creation

Creation of table by CREATE command:

SQL> create table student(regno number,name varchar(10),dept varchar(20),age number,phno number);

SQL> Table Created.

SQL> desc student;

```
 Name                           Null?   Type
 --------------------------------------- -------- ---------------------------
 REGNO                           NUMBER
 NAME                            VARCHAR2(10)
 DEPT                            VARCHAR2(20)
 AGE                            NUMBER
 PHNO                            NUMBER
```

Inserting the values into table by INSERT command:

SQL> insert into student values(&regno,'&name','&dept',&age,&phno);
Enter value for regno: 52
Enter value for name: Mari
Enter value for dept: BCA
Enter value for age: 19
Enter value for phno: 9894156789
old   1: insert into student values(&regno,'&name','&dept',&age,&phno)
new   1: insert into student values(52,'Mari','BCA',19,9894156789)

1 row created.

SQL> /
Enter value for regno: 55
Enter value for name: Asik
Enter value for dept: IT
Enter value for age: 19
Enter value for phno: 5678943567
old   1: insert into student values(&regno,'&name','&dept',&age,&phno)
new   1: insert into student values(55,'Asik','IT',19,5678943567)

1 row created.

SQL> /
Enter value for regno: 56
Enter value for name: Mohan

Enter value for dept: CS
Enter value for age: 20
Enter value for phno: 8999789907
old   1: insert into student values(&regno,'&name','&dept',&age,&phno)
new   1: insert into student values(56,'Mohan','CS',20,8999789907)

1 row created.

SQL> /
Enter value for regno: 57
Enter value for name: Muthu
Enter value for dept: BCA
Enter value for age: 19
Enter value for phno: 8868879090
old   1: insert into student values(&regno,'&name','&dept',&age,&phno)
new   1: insert into student values(57,'Muthu','BCA',19,8868879090)

1 row created.

SQL> /
Enter value for regno: 58
Enter value for name: Nantha
Enter value for dept: BCA
Enter value for age: 19
Enter value for phno: 9090877656
old   1: insert into student values(&regno,'&name','&dept',&age,&phno)
new   1: insert into student values(58,'Nantha','BCA',19,9090877656)

1 row created.

SQL> select*from student;

REGNO	NAME	DEPT	AGE	PHNO
52	Mari	BCA	19	9894156789
55	Asik	IT	19	5678943567
56	Mohan	CS	20	8999789907
57	Muthu	BCA	19	8868879090
58	Nantha	BCA	19	9090877656

Adding 1 column in the table using ALTER (ADD) command:

SQL> alter table student add(location varchar(20));

Table altered.

SQL> desc student;

```
 Name                             Null?    Type
 --------------------------------- -------- ---------------------------
 REGNO                                      NUMBER
 NAME                                       VARCHAR2(10)
 DEPT                                       VARCHAR2(20)
 AGE                                        NUMBER
 PHNO                                       NUMBER
 LOCATION                                   VARCHAR2(20)
```

Update the new add column data by UPDATE command:

SQL> update student set location='Srivilliputtur' where regno='52';

1 row updated.

SQL> update student set location='Sivakasi' where regno='55';

1 row updated.

SQL> update student set location='Anaikuttam' where regno='56';

1 row updated.

SQL> update student set location='Srivilliputtur' where regno='57';

1 row updated.

SQL> update student set location='Sivakasi' where regno='58';

1 row updated.

SQL> select*from student;

```
  REGNO NAME      DEPT               AGE     PHNO  LOCATION

 ---------- ---------- --------------------  ---------- ---------- --------------------
    52 Mari     BCA            19     9894156789      Srivilliputtur

    55 Asik     IT             19     5678943567       Sivakasi

    56 Mohan    CS             20   8999789907     Anaikuttam
```

```
    57 Muthu     BCA                19  8868879090      Srivilliputtur

    58 Nantha    BCA                19 9090877656       Sivakasi
```

Deleting one column using ALTER (DROP) command:

SQL> alter table student drop(phno);

Table altered.

SQL> select*from student;

```
    REGNO NAME       DEPT            AGE LOCATION
---------- ---------- ------------------- ---------- --------------------
    52 Mari     BCA                 19 Srivilliputtur
    55 Asik     IT                  19 Sivakasi
    56 Mohan    CS                  20 Anaikuttam
    57 Muthu    BCA                 19 Srivilliputtur
    58 Nantha   BCA                 19 Sivakasi
```

Recover the deleted data using SAVEPOINT and ROLLBACK Command :

SQL> savepoint dp;

Savepoint created.

SQL> select*from student;

```
    REGNO NAME       DEPT            AGE LOCATION
---------- ---------- ------------------- ---------- --------------------
    52 Mari     BCA                 19 Srivilliputtur
    55 Asik     IT                  19 Sivakasi
    56 Mohan     CS                 20 Anaikuttam
    57 Muthu     BCA                19 Srivilliputtur
    58 Nantha    BCA                19 Sivakasi
```

SQL> delete from student where regno='58';

1 row deleted.

SQL> select*from student;

```
    REGNO NAME       DEPT            AGE LOCATION
---------- ---------- ------------------- ---------- --------------------
    52 Mari     BCA                 19 Srivilliputtur
```

```
      55 Asik     IT               19 Sivakasi
      56 Mohan    CS               20 Anaikuttam
      57 Muthu    BCA              19 Srivilliputtur
```

SQL> rollback to dp;

Rollback complete.

SQL> select*from student;

```
   REGNO NAME      DEPT               AGE LOCATION
---------- ---------- -------------------- ---------- --------------------
      52 Mari      BCA              19 Srivilliputtur
      55 Asik      IT               19 Sivakasi
      56 Mohan     CS               20 Anaikuttam
      57 Muthu     BCA              19 Srivilliputtur
      58 Nantha    BCA              19 Sivakasi
```

Modifying the Field datatype by ALTER (MODIFY) command :

SQL> desc student;

```
 Name                                   Null?   Type
 --------------------------------------- -------- ---------------------------
 REGNO                                  NUMBER
 NAME                                   VARCHAR2(10)
 DEPT                                   VARCHAR2(20)
 AGE                                    NUMBER
 LOCATION                               VARCHAR2(20)
```

SQL> alter table student modify(regno varchar(10));

Table altered.

SQL> desc student;
```
 Name                            Null?   Type
 --------------------------------------- -------- ---------------------------
 REGNO                                  VARCHAR2(10)
 NAME                                   VARCHAR2(10)
 DEPT                                   VARCHAR2(20)
 AGE                                    NUMBER
 LOCATION                               VARCHAR2(20)
```

Save the table in the Database:

SQL> commit;

Commit complete.