LAB 7

Malik Zohaib Mustafa

01-134192-030

BSCS-4B

To implement Constraints.

- (a)Primary key, (b). Foreign Key, (c). Check, (d). Unique, (e). Null,
- (f). Not null.
- 1. Write a query to create primary constraints with table level with naming convention.

```
SQL> /* MALIK ZOHAIB MUSTAFA */
SQL> /* 01-134192-030 */
SQL> /* BSCS-4B */
SQL> CREATE TABLE ZAIBI
  2
      STID NUMBER(10),
  3
      STNAME VARCHAR(25),
  5 STADDRESS VARCHAR(25),
  6 STCITY VARCHAR(30),
  7 CONSTRAINT STID_PK PRIMARY KEY(STID)
  8 );
Table created.
SQL> DESC ZAIBI;
 Name
                                                     Null?
                                                                Type
                                                     NOT NULL NUMBER(10)
 STID
 STNAME
                                                                VARCHAR2(25)
 STADDRESS
                                                                VARCHAR2(25)
                                                                VARCHAR2(30)
 STCITY
```

2. CREATE TABLE EMPLOYEE (EMPNO NUMBER (6),

ENAME VARCHAR2(20),

JOB VARCHAR2(6),

SAL NUMBER (7),

DEPTNO NUMBER (5),

CONSTRAINT EMP_EMPNO_PK PRIMARY

KEY(EMPNO));

Table level constraint with alter command (primary key):

```
SQL> /* MALIK ZOHAIB MUSTAFA */
SQL> /* 01-134192-030 */
SQL> /* BSCS-4B */
SQL>
SQL> CREATE TABLE EMPLOYEE (EMPNO NUMBER (6),
 2 ENAME VARCHAR2(20),
 3 JOB VARCHAR2(6),
 4 SAL NUMBER (7),
 5 DEPTNO NUMBER (5),
 6 CONSTRAINT EMP_EMPNO_PK PRIMARY
 7 KEY(EMPNO));
Table created.
SQL> DESC EMPLOYEE;
Name
                                          Nu11?
                                                   Type
EMPN0
                                          NOT NULL NUMBER(6)
ENAME
                                                    VARCHAR2(20)
 JOB
                                                    VARCHAR2(6)
SAL
                                                    NUMBER(7)
DEPTNO
                                                    NUMBER(5)
```

3. Write a query to create primary constraints with alter command.

```
SQL>
SQL>
        /* MALIK ZOHAIB MUSTAFA */
SQL>
       /* 01-134192-030 */
SQL>
       /* BSCS-4B */
SQL>
       CREATE TABLE ZAIBI2 (
  2
       EMPNO NUMBER (6),
       ENAME VARCHAR2(20),
  3
  4
      JOB VARCHAR2(6),
  5
      SAL NUMBER (7),
      DEPTNO NUMBER (5)
  ó
      );
Table created.
SQL> ALTER TABLE ZAIBI2 MODIFY EMPNO PRIMARY KEY;
Table altered.
```

4. Write a query to create foreign key constraints with column level.

```
SQL>
       /* MALIK ZOHAIB MUSTAFA */
SQL>
       /* 01-134192-030 */
SQL>
       /* BSCS-4B */
SQL>
SQL>
       CREATE TABLE ZAIBI2 (
       EMPNO NUMBER (6),
  3
       ENAME VARCHAR2(20),
       JOB VARCHAR2(6),
  4
      SAL NUMBER (7),
  5
     DEPTNO NUMBER (5)
      );
Table created.
SQL> ALTER TABLE ZAIBI2 MODIFY EMPNO PRIMARY KEY;
Table altered.
SQL> ALTER TABLE ZAIBI2 MODIFY FOREIGN KEY(DEPTNO) REFERENCES ZAIBI(STID);
Table altered.
```