

EXPERIMENT NO-8

AIMS- Applying foreign key constraint & check constraint on database.

Example:- Create a table sales-order-detail table with its primary key with detail order no & product no. The foreign key is detail order no, reference column no in the sales-order table.

```
CREATE TABLE sales-order-detail  
(detail order no varchar(2(16)), REFERENCES sales order  
product no varchar(2(16))  
qty ordered no(8), qty-disp no(8), product rate  
no 8(+)
```

PRIMARY KEY (detail order no, product no);

Example:-

Create table sales-order-detail with the primary key as detail order no & product no & foreign key at table level as detail order no referencing column order no in the sales order table.

```
CREATE TABLE sales-order-detail  
(detail order no, varchar(2(16)), product no varchar(2  
Qty-ordered number(8), qty-disp-number(8).
```

PRIMARY KEY (detail-order no, product-no);
FOREIGN KEY (detail-order-no) REFERENCES (sales-order);

EXPERIMENT NO- 8.

AIM:- Applying foreign key constraint & check constraint on data base.

THEORY:-

* Foreign key concept:- Foreign key represents relationships between tables. A foreign key is a column whose values are derived from primary key or unique key of some other table.

The table in which the foreign key is required is called as foreign table or slave table detail. The table that defines a unique key is called the primary table or master table.

* Foreign key constraint at column level
Syntax:- column name datatype (size) REFERENCES
 tablename [(columnname)]
 [on delete cascade]

* The check constraint:-

Business rule validation can be applied to a table column by using check constraint. Check constraint must be specification as a logical expression that evaluate either true or false.

columnname datatype (size) CHECK (logical expression)

Teacher's Signature : _____

Example 3-

- Create a table client master with following check constraints
- Data value being inserted into the column name should be in upper case only.
- Data value being inserted into column client no must start with capital letter c.
- Data values being inserted into column name only allow "Bombay", "Delhi", "Madras" and "Calcutta" as legitimate values for the column city.

CREATE TABLE client master.

(client-no varchar 2(16) CHECK (client no like 'c%',
name varchar 2(20) CHECK (name = upper (name)),
address1 varchar 2(30), address 2 varchar 2(30),
city varchar 2(15) CHECK (city in ('Delhi', 'Bombay',
'Calcutta', 'Madras'));
state varchar 2(15), Pin code number (6)
remarks varchar 2(60), Bal number (10, 2);

Example 4

CREATE TABLE client master.

(client no varchar 2(6), name varchar 2(20), address1
varchar 2(30), address 2 varchar 2(15), pin code no,
city varchar 2(15), state varchar 2(15), remarks
varchar 2(10), bal due no (10, 2)

CHECK (client no like 'c%');

CHECK (name = upper (name));

CHECK (city in ('Delhi', 'Bombay', 'Calcutta', 'Madras'));

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* Check constraint defined at table level & check (logical expression)

* Foreign key constraints at table level
FOREIGN KEY (column name [column name])
REFERENCES table name [(column name [column name])]

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