EXPERIMENT NO: 3
Study Of Constraints

AIM:

Study About Different Constraints.

THEORETICAL BACKGROUND:

CONTRAINTS

In DBMS (Database Management Systems), constraints are **guidelines or limitations imposed on database tables to maintain the integrity, correctness, and consistency of the data**. Constraints can be used to enforce data linkages across tables, verify that data is unique, and stop the insertion of incorrect data.

Types Of Constraints

1. NOTNULL
2. UNIQUE
3. PRIMARY KEY
4. FOREIGN KEY
5. CHECK
6. DEFAULT

Questions:

1. Create a table with name customer and fields as follows:
   cust_id number, name varchar2(20), hname varchar2(20), street varchar2(20), phone integer.

   create table customer(cust_id int,name varchar(20),hname varchar(20),street varchar(20),phone int);

2. Create table items with the following fields:
   item_code number, name char(1) , Current_stock number, Unitprice number

   create table items(item_code number(5), name varchar2(20), stock_number int, unit_price int);

3) Create table order with fields as follows
Order_id number, Cust_id number, Item_code number,Order_quantity number, Delivery_date date, payment_mode char(1).

create table order(order_id int, cust_id int, item_code int(5), order_date date, expiry_date date, delivery_date date, payment_mode char(1));

4). Alter the table to add a primary key to cust_id in customer.

alter table customer add constraint p1k primary key(cust_id);

5). Alter the table to add a primary key to item_code in items.

alter table items add constraint p2k primary key(item_code);

6). Alter the table to set foreign key constraint in order to link with customer using cust_id field.

alter table order add constraint foreign key references customer(cust_id);

7). Add a not null constraint to the field order_date.

alter table order modify order_date constraint c1 not null;

8). Add a unique constraint for the order_id in order.

alter table order modify order_id constraint c2 unique;

9). Add a check constraint to the field payment_mode in order such that it takes three values'D' (for cheque), 'R' (for cash) and 'C' (for credit card).

alter table order add constraint c3 check (payment_mode in ('D', 'R', 'C'));

10). Add a new field 'remark' as char(10) to the order and set the default value as 'direct'.

alter table order add remark char(10) default 'direct';

11). Drop all the Tables customer , order and items.

Drop Table customer;
Drop Table items;
Drop Table Order;

RESULT:

The query was executed successfully and output was verified.