

Assignment 18

1) Create a table called Cityorders. This will contain the same onum, amt and snum fields as the Orders table, and the same cnum and city fields as the Customers table, so that each customer's order will be entered into this table along with his or her city. Onum will be the primary key of Cityorders. All of the fields in Cityorders will be constrained to match the Customers and Orders tables. Assume the parent keys in these tables already have the proper constraints.

Ans: create table cityorders as select o.onum, o.amt, o.snum, o.cnum, c.city from orders o join customers c on o.cnum=c.cnum;

alter table orders add constraint pk_orders_onum primary key(onum);

alter table cityorders add constraint fk_cityorders_onum foreign key(onum) references orders(onum);

alter table customers add constraint pk_customers_cnum primary key(cnum);

alter table cityorders add constraint fk_cityorders_cnum foreign key(cnum) references customers(cnum);

alter table cityorders add constraint pk_cityorders_onum primary key(onum);

desc cityorders;

```

D6_93079_Pravin>create table cityorders
-> as select o.onum, o.amt, o.snum, o.cnum, c.city
-> from orders o join customers c
-> on o.cnum=c.cnum;
Query OK, 10 rows affected, 1 warning (0.01 sec)
Records: 10 Duplicates: 0 Warnings: 1

D6_93079_Pravin>alter table orders add constraint pk_orders_onum
-> primary key(onum);
ERROR 1068 (42000): Multiple primary key defined
D6_93079_Pravin>alter table cityorders add constraint fk_cityorders_onum
-> foreign key(onum) references orders(onum);
Query OK, 10 rows affected (0.04 sec)
Records: 10 Duplicates: 0 Warnings: 0

D6_93079_Pravin>alter table customers add constraint pk_customers_cnum
-> primary key(cnum);
Query OK, 0 rows affected (0.05 sec)
Records: 0 Duplicates: 0 Warnings: 0

D6_93079_Pravin>alter table cityorders add constraint fk_cityorders_cnum
-> foreign key(cnum) references customers(cnum);
Query OK, 10 rows affected (0.03 sec)
Records: 10 Duplicates: 0 Warnings: 0

D6_93079_Pravin>alter table cityorders add constraint pk_cityorders_onum
-> primary key(onum);
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0

D6_93079_Pravin>desc cityorders;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| onum  | int           | NO   | PRI | NULL    |       |
| amt   | float(7,2)    | YES  |     | NULL    |       |
| snum  | int           | YES  |     | NULL    |       |
| cnum  | int           | YES  | MUL | NULL    |       |
| city  | varchar(10)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

```

2) Redefine the Orders table as follows:- add a new column called prev, which will identify, for each order, the onum of the previous order for that current customer. Implement this with a foreign key referring to the Orders table itself. The foreign key should refer as well to the cnum of the customer, providing a definite enforced link between the current order and the one referenced.

Ans: alter table orders add column prev int;

alter table orders add constraint fk_orders_prev foreign key(prev) references orders(onum);

alter table orders add constraint fk_orders_cnum foreign key(cnum) references customers(cnum);

desc orders;

```

D6_93079_Pravin>alter table orders add column prev int;
Query OK, 0 rows affected (0.10 sec)
Records: 0 Duplicates: 0 Warnings: 0

D6_93079_Pravin>alter table add constraint fk_orders_prev foreign key(prev)
-> references orders(onum);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corres
for the right syntax to use near 'add constraint fk_orders_prev foreign key(prev)
references orders(onum)' at line 1
D6_93079_Pravin>alter table orders add constraint fk_orders_prev foreign key(prev)
-> references orders(onum);
Query OK, 10 rows affected (0.10 sec)
Records: 10 Duplicates: 0 Warnings: 0

D6_93079_Pravin>alter table orders add constraint fk_orders_cnum foreign key(cnum)
-> references customers(cnum);
Query OK, 10 rows affected (0.04 sec)
Records: 10 Duplicates: 0 Warnings: 0

D6_93079_Pravin>desc orders;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| onum  | int           | NO   | PRI | NULL    |       |
| amt   | float(7,2)    | YES  |     | NULL    |       |
| odate | date          | YES  | MUL | NULL    |       |
| cnum  | int           | YES  | MUL | NULL    |       |
| snum  | int           | YES  | MUL | NULL    |       |
| prev  | int           | YES  | MUL | NULL    |       |
+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)

```