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SL1 ASSIGNMENT 4

Problem Statement: Design & Develop DB for "Order Management System" with all the constraints. (There must be At least 3 entities and relationships between them.). The statement should use SQL objects such as Table, View, Index, and Sequence. Draw suitable ER/EER diagram for the system. Apply DCL and DDL commands to convert ER/EER diagram to tables.

Creating the database

```
mysql> create database order_management;
Query OK, 1 row affected (0.00 sec)
mysql> use order_management;
Database changed
```

Creating table customers

```
mysql> create table customer(cust_id int primary key, fname varchar(50), lname
varchar(50), email varchar(50), phone_number int(15));
Query OK, 0 rows affected (0.02 sec)
```

Creating table contact

```
mysql> create table contact(cust_id int, phone_number int(15));
Query OK, 0 rows affected (0.05 sec)
```

Creating table orders

```
mysql> create table orders(order_id int primary key, prod_id int, cust_id int,
quantity int, purchase_date date, city varchar(50));
Query OK, 0 rows affected (0.02 sec)
```

Creating table products

```
mysql> create table products(prod_id int, prod_name varchar(50), price int, category varchar(50));
Query OK, 0 rows affected (0.02 sec)
```

Adding foreign keys

```
mysql> alter table contact add foreign key(cust id) references
customer(cust id);
Query OK, 0 rows affected (0.10 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> alter table contact add primary key(cust id, phone number);
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> alter table orders add foreign key(cust id) references customer(cust id);
Query OK, 0 rows affected (0.11 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> alter table products add primary key(prod id);
Query OK, 0 rows affected (0.03 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> alter table orders add foreign key(prod id) references products(prod id);
Query OK, 0 rows affected (0.15 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

Describing all the created tables

```
mysql> desc customer;
+----+
   | Type | Null | Key | Default | Extra |
| Field
+----+
| fname
    | NULL
| lname
    | NULL
| email
     | NULL
| phone_number | int(15)
         | YES |
              NULL
+----+
```

```
mysql> desc contact;
+----+
       | Type | Null | Key | Default | Extra |
| Field
+----+
| phone_number | int(15) | NO
                | PRI | NULL
+----+
2 rows in set (0.00 sec)
mysql> desc orders;
+----+
               | Null | Key | Default | Extra |
| Field
        | Type
+-----
order_id
        | int(11)
               NO PRI NULL
| prod id
        | int(11)
               | YES | MUL | NULL
| cust id
       | int(11)
              | YES | MUL | NULL
| quantity
       | int(11)
               | YES |
                      NULL
| purchase date | date
               | YES |
                      NULL
        | varchar(50) | YES |
| citv
                      NULL
+----+
6 rows in set (0.01 sec)
mysql> desc products;
+----+
| Field
      | Type
             | Null | Key | Default | Extra |
+----+
| prod id
      | prod_name | varchar(50) | YES |
                    NULL
      | int(11)
            | YES |
| price
                    NULL
| category | varchar(50) | YES | NULL
+----+
```

mysql> alter table customer modify column phone_number double; Query OK, 0 rows affected (0.03 sec) Records: 0 Duplicates: 0 Warnings: 0 mysql> alter table contact modify column phone_number double; Query OK, 0 rows affected (0.06 sec) Records: 0 Duplicates: 0 Warnings: 0

Inserting values in "customer" table

mysql> insert into customer values(1, 'prajakta', 'keer', 'pkeer@gmail.com',
9089786756), (2, 'shravani', 'indapure', 'shravani@gmail.com', 9021977490), (3,
'janhavi', 'patil', 'jpatil@gmail.com', 9087654321), (4, 'arnavi', 'joshi',
'ajoshi@gmail.com', 9012345678), (5, 'rishita', 'jadhav', 'rjadhav@gmail.com',
9087654321), (7, 'elina', 'fernandes', 'elina@gmail.com', 9102837465), (8,
'anushree', 'kamble', 'akamble@gmail.com', 91112223334), (9, 'priety', 'saha',
'psaha@gmail.com', 98887776665), (10, 'jyoti', 'verma', 'jverma@gmail.com',
7719916429);
Query OK, 9 rows affected (0.01 sec)
Records: 9 Duplicates: 0 Warnings: 0

mysql> update customer set fname = 'raveena' where cust_id = 4;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> update customer set fname = 'ravi' where cust_id = 10;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> select * from customer;

		L	L	L
cust_id	fname	lname	email	phone_number
1 2 3 4 5 7 8 9 10	prajakta shravani janhavi raveena rishita elina anushree priety ravi	keer indapure patil joshi jadhav fernandes kamble saha verma	pkeer@gmail.com shravani@gmail.com jpatil@gmail.com ajoshi@gmail.com rjadhav@gmail.com elina@gmail.com akamble@gmail.com psaha@gmail.com	9089786756 9021977490 9087654321 9012345678 9087654321 9102837465 91112223334 98887776665 7719916429

9 rows in set (0.00 sec)

Inserting values in "contact" table

mysql> insert into contact values(1, 9089786756), (2, 9021977490), (3, 9087654321), (4, 9012345678), (5, 9087654321), (7, 9102837465), (8, 9111222333), (9, 9888777666), (10, 7719916429); Query OK, 9 rows affected (0.00 sec) Records: 9 Duplicates: 0 Warnings: 0

```
mysql> select * from contact;
+----+
| cust_id | phone_number |
+-----+
       1 |
            9089786756
      2 |
            9021977490
       3 |
            9087654321
       4 |
            9012345678
       5 1
            9087654321
       7 Ì
            9102837465
       8
            9111222333
      9
            9888777666
      10 |
            7719916429
9 rows in set (0.00 sec)
```

Inserting values in "orders" table

```
mysql> insert into orders values(1001, 105, 1, 1, '2020-2-2', 'pune'), (1002, 104, 2, 2, '2010-3-3', 'nagpur'), (1003, 103, 3, 3, '2001-2-8', 'mumbai'),
(1004, 102, 4, 4, '2003-2-2', 'nashik'), (1005, 101, 5, 1, '2016-8-22', 'pune'), (1006, 106, 3, 2, '2016-8-22', 'pune'), (1007, 107, 7, 3, '2015-5-5', 'nagpur'), (1008, 108, 8, 4, '2005-5-5', 'mumbai'), (1009, 109, 9, 1, '2015-9-9', 'nashik'), (1010, 110, 10, 1, '2001-5-23', 'nagpur'), (1011, 105, 1, 2, '2012-12', 'mumbai'), (1012, 104, 2, 3, '1997-9-5', 'nashik'), (1013, 103, 3, 4, '1999-5-25', 'pune'), (1014, 102, 4, 1, '2011-8-15', 'nagpur'), (1015, 101, 5, 2, '2020, 11, 31', 'mumbai');
2, '2020-11-21', 'mumbai');
Query OK, 15 rows affected (0.01 sec)
Records: 15 Duplicates: 0 Warnings: 0
mysql> alter table orders add column amount int after quantity;
Query OK, 0 rows affected (0.13 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> update orders set amount = 2500 where order id = 1001;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> update orders set amount = 10000 where order_id = 1002;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> update orders set amount = 6000 where order id = 1003;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> update orders set amount = 4000 where order id = 1004;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> update orders set amount = 50000 where order id = 1005;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> update orders set amount = 1000 where order id = 1006;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
mysgl> update orders set amount = 165000 where order id = 1007;
Ouery OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> update orders set amount = 3200 where order_id = 1008;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> update orders set amount = 1200 where order id = 1009;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> update orders set amount = 300 where order_id = 1010;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> update orders set amount = 5000 where order id = 1011;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> update orders set amount = 15000 where order_id = 1012;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> update orders set amount = 12000 where order id = 1013;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> update orders set amount = 1000 where order id = 1014;
Ouery OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> update orders set amount = 10000 where order id = 1015;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> select * from orders;
```

	order_id	prod_id	cust_id	quantity	amount	purchase_date	city	
Ĭ	1001	105	1	1	2500	2020-02-02	pune	Ī
ĺ	1002	104	2	2	10000	2010-03-03	nagpur	ĺ
ĺ	1003	103	3	3	6000	2001-02-08	mumbai	ĺ
İ	1004	102	4	4	4000	2003-02-02	nashik	İ
İ	1005	101	5	1	50000	2016-08-22	pune	İ
İ	1006	106	3	2	1000	2016-08-22	pune	İ
j	1007	107	7	3	165000	2015-05-05	nagpur	İ
ĺ	1008	108	8	4	3200	2005-05-05	mumbai	İ
ĺ	1009	109	9	1	1200	2015-09-09	nashik	İ
ĺ	1010	110	10	1	300	2001-05-23	nagpur	İ
ĺ	1011	105	1	2	5000	2012-12-12	mumbai	İ
ĺ	1012	104	2	3	15000	1997-09-05	nashik	İ
ĺ	1013	103	3	4	12000	1999-05-25	pune	İ
ĺ	1014	102	4	1	1000	2011-08-15	nagpur	ĺ
ĺ	1015	101	5	2	10000	2020-11-21	mumbai	ĺ
+						+	+	+

mysql> insert into products values(101, 'apple7', 50000, 'electronics'), (102, 'football', 1000, 'sports'), (103, 'sanitizer', 2000, 'healthcare'), (104, 'jersey', 5000, 'sports'), (105, 'sweatshirt', 2500, 'clothing'), (106, '3 ply masks', 500, 'healthcare'), (107, 'macbook', 55000, 'electronics'), (108, 'saree', 800, 'clothing'), (109, 'carpet', 1200, 'decor'), (110, 'disinfectant', 300, 'healthcare');

Query OK, 10 rows affected (0.00 sec) Records: 10 Duplicates: 0 Warnings: 0

mysql> select * from products;

+			·			
prod_id	prod_name	price	category			
+		h				
101	apple7	50000	electronics			
102	football	1000	sports			
103	sanitizer	2000	healthcare			
104	jersey	5000	sports			
105	sweatshirt	2500	clothing			
106	3 ply masks	500	healthcare			
107	macbook	55000	electronics			
108	saree	800	clothing			
109	carpet	1200	decor			
110	disinfectant	300	healthcare			
+						