

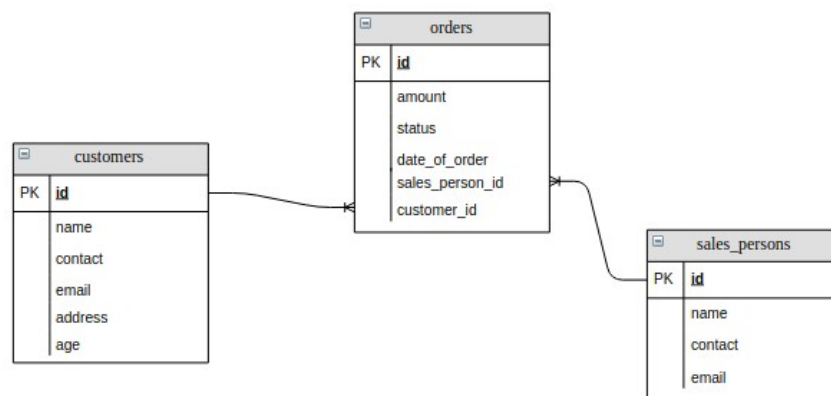
Exercise

Problem Statement: There can be multiple customers, who can place multiple orders on the site. Now a sales person can handle these orders will distribute into multiple sales persons (One order will be assign to one salesperson only). So a sales person can have multiple orders of multiple customers

1. Create Database

```
mysql> create database ekart;  
Query OK, 1 row affected (0.01 sec)
```

2. Design Schema



3. Create tables

```
mysql> create table customers(id int primary key auto_increment,name varchar(50),email varchar(100),address varchar(200),contact bigint(10),age int(3));  
Query OK, 0 rows affected (0.36 sec)  
  
mysql> create table sales_person(id int primary key auto_increment,name varchar(50),email varchar(100),contact bigint(10));  
Query OK, 0 rows affected (0.37 sec)  
  
mysql> create table orders(id int primary key auto_increment,amount double(10,2),status enum('delivered','out_for_delivery','created'),date_of_order date,sales_person int references sales_person(id),customer_id int references customers(id));  
Query OK, 0 rows affected (0.40 sec)
```

4. Insert sample data

```
File Edit View Search Terminal Help
mysql> insert into customers values(2, 'Mella Clougher', 'mclougher1@google.es',
'81 Marquette Place', 8378579628, 39)
-> ,(3, 'Chaim Melbourn', 'cmelbourn2@microsoft.com', '1 Hermina Trail', 998
9685515, 20)
-> ,(4, 'Winifred Donaghy', 'wdonaghy3@artisteer.com', '3266 Glacier Hill Pl
aza', 9771817464, 47)
-> ,(5, 'Rinaldo Millar', 'rmillar4@yale.edu', '612 Oxford Court', 960524548
9, 35)
-> ,(6, 'Lori Kershaw', 'lkershaw5@bandcamp.com', '4368 Towne Street', 79125
73586, 36)
-> ,(7, 'Lauri Alebrooke', 'lalebrooke6@t.co', '67 Ridgeway Plaza', 84913828
46, 44)
-> ,(8, 'Teriann Lewisham', 'tlewisham7@barnesandnoble.com', '8655 Surrey Ro
ad', 8608216942, 38)
-> ,(9, 'Ruthi Brehaut', 'rbrehaut8@cnet.com', '24 Lakeland Drive', 84132256
84, 47)
-> ,(10, 'Sampson Strathe', 'sstrathe9@tripod.com', '5837 David Avenue', 968
0573422, 48);
Query OK, 9 rows affected (0.07 sec)
Records: 9 Duplicates: 0 Warnings: 0
```

```
mysql> insert into sales_person (id, name, email, contact) values (1, 'Henrieta
Flukes', 'hflukes0@reverbnation.com', 9106156009),(2, 'Maureene Jarrett', 'mjarr
ett1@jigsy.com', 8954682263),(3, 'Dalt Simic', 'dsimic2@opensource.org', 9292339
811),(4, 'Niels Salan', 'nsalan3@hexun.com', 7845416228),(5, 'Geoff O''Henecan',
'gohenecan4@privacy.gov.au', 8070199330),(6, 'Margret Chaney', 'mchaney5@nsw.go
v.au', 8489909532),(7, 'Cornall Denerley', 'cdenerley6@sun.com', 9193317027),(8,
'Homer Garlick', 'hgarlick7@friendfeed.com', 7779625884),(9, 'Patrizius Vivyan',
'pvivyan8@plala.or.jp', 9377970127),(10, 'Devon Moye', 'dmoye9@eepurl.com', 86
58423329);
Query OK, 10 rows affected (0.09 sec)
Records: 10 Duplicates: 0 Warnings: 0
```

```
mysql> insert into orders (id, amount, status, date_of_order, sales_person_id, c
ustomer_id) values (1, 7270.97, 'deliverd', '2019-01-27', 4, 9),(2, 5390.1, 'cre
ated', '2019-01-15', 6, 7),(3, 8713.81, 'out_for_delivery', '2018-11-05', 8, 4),
(4, 6457.36, 'out_for_delivery', '2018-08-10', 4, 1),(5, 6062.71, 'created', '20
18-07-13', 4, 9),(6, 6731.97, 'out_for_delivery', '2018-09-30', 2, 1),(7, 5874.0
9, 'out_for_delivery', '2018-08-01', 10, 6),(8, 5295.2, 'out_for_delivery', '201
8-03-23', 3, 9),(9, 9810.38, 'deliverd', '2018-05-12', 9, 7),(10, 7766.57, 'deli
verd', '2018-02-15', 9, 2);
Query OK, 10 rows affected (0.08 sec)
Records: 10 Duplicates: 0 Warnings: 0
```

5. Find the sales person have multiple orders.

```
mysql> select count(o.id) no_of_orders, sp.name from orders o join sales_person s
p on sp.id=o.sales_person_id group by o.sales_person_id having count(o.id)>1;
+-----+-----+
| no_of_orders | name           |
+-----+-----+
|          3 | Niels Salan    |
|          2 | Patrizius Vivyan |
+-----+-----+
2 rows in set (0.00 sec)
```


6. Find the all sales person details along with order details

```
mysql> select sp.name,o.amount,o.date_of_order,o.status from orders o join sales
_person sp on sp.id=o.sales_person_id order by sp.name;
+-----+-----+-----+-----+
| name          | amount | date_of_order | status          |
+-----+-----+-----+-----+
| Dalt Simic    | 5295.20 | 2018-03-23    | out_for_delivery |
| Devon Moyer   | 5874.09 | 2018-08-01    | out_for_delivery |
| Homer Garlick | 8713.81 | 2018-11-05    | out_for_delivery |
| Margret Chaney | 5390.10 | 2019-01-15    | created         |
| Maureen Jarrett | 6731.97 | 2018-09-30    | out_for_delivery |
| Niels Salan   | 6457.36 | 2018-08-10    | out_for_delivery |
| Niels Salan   | 7270.97 | 2019-01-27    | deliverd        |
| Niels Salan   | 6062.71 | 2018-07-13    | created         |
| Patrizius Vivyan | 7766.57 | 2018-02-15    | deliverd        |
| Patrizius Vivyan | 9810.38 | 2018-05-12    | deliverd        |
+-----+-----+-----+-----+
10 rows in set (0.00 sec)
```

7. Create index

```
mysql> alter table customers add index email_index(email)
-> ;
Query OK, 0 rows affected (0.40 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

8. How to show index on a table

```
mysql> show index from customers;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Table | Non_unique | Key_name | Seq_in_index | Column_name | Collation | Cardinality | Sub_part | Packed | Null | Index_type | Comment |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| customers | 0 | PRIMARY | 1 | id | A | 10 | NULL | NULL | YES | BTREE | |
| customers | 1 | email_index | 1 | email | A | 10 | NULL | NULL | YES | BTREE | |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

9. Find the order number, sale person name, along with the customer to whom that order belongs to

```
mysql> select o.id,sp.name,o.status,c.name from orders o join sales_person sp on
sp.id=o.sales_person_id join customers c on c.id=o.customer_id;
+-----+-----+-----+-----+
| id | name          | status          | name          |
+-----+-----+-----+-----+
| 1 | Niels Salan   | deliverd        | Ruthi Brehaut |
| 2 | Margret Chaney | created         | Lauri Alebrooke |
| 3 | Homer Garlick | out_for_delivery | Winifred Donaghy |
| 4 | Niels Salan   | out_for_delivery | Maighdiln Berntsson |
| 5 | Niels Salan   | created         | Ruthi Brehaut |
| 6 | Maureen Jarrett | out_for_delivery | Maighdiln Berntsson |
| 7 | Devon Moyer   | out_for_delivery | Lori Kershaw |
| 8 | Dalt Simic    | out_for_delivery | Ruthi Brehaut |
| 9 | Patrizius Vivyan | deliverd        | Lauri Alebrooke |
| 10 | Patrizius Vivyan | deliverd        | Mella Clougher |
+-----+-----+-----+-----+
```