LAB-03
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1.

```
[mysql> alter table Customers add primary key(CustomerID);
Query OK, 0 rows affected (0.03 sec)
Records: 0  Duplicates: 0  Warnings: 0

[mysql> desc Customers;
+--------------+-------------+------+-----+---------+-------+
| Field        | Type        | Null | Key | Default | Extra |
+--------------+-------------+------+-----+---------+-------+
| CustomerID   | int         | NO   | PRI | NULL    |       |
| Dateofbirth  | date        | YES  |     | NULL    |       |
| Gender       | varchar(5)  | YES  |     | NULL    |       |
| CustomerName | varchar(30) | YES  |     | NULL    |       |
| City         | varchar(20) | YES  |     | NULL    |       |
| country      | varchar(10) | YES  |     | NULL    |       |
+--------------+-------------+------+-----+---------+-------+
6 rows in set (0.00 sec)
```

2.

```
mysql> alter table products add constraint foreign key (ProductID) references customers(CustomerID)
;
Query OK, 0 rows affected (0.04 sec)
Records: 0  Duplicates: 0  Warnings: 0

[mysql> desc products;                                                    ]
+--------------+-------------+------+-----+---------+-------+
| Field        | Type        | Null | Key | Default | Extra |
+--------------+-------------+------+-----+---------+-------+
| CustomerID   | int         | YES  |     | NULL    |       |
| ProductID    | int         | YES  | MUL | NULL    |       |
| ProductName  | varchar(20) | YES  |     | NULL    |       |
| Availability | varchar(20) | YES  |     | NULL    |       |
| Price        | int         | YES  |     | NULL    |       |
+--------------+-------------+------+-----+---------+-------+
5 rows in set (0.01 sec)
```

3.

```
[mysql> alter table products
[    -> alter Availability set default 'yes';
Query OK, 0 rows affected (0.03 sec)
Records: 0  Duplicates: 0  Warnings: 0

[mysql> desc products;
+--------------+-------------+------+-----+---------+-------+
| Field        | Type        | Null | Key | Default | Extra |
+--------------+-------------+------+-----+---------+-------+
| CustomerID   | int         | YES  |     | NULL    |       |
| ProductID    | int         | YES  | MUL | NULL    |       |
| ProductName  | varchar(20) | YES  |     | NULL    |       |
| Availability | varchar(20) | YES  |     | yes     |       |
| Price        | int         | YES  |     | NULL    |       |
+--------------+-------------+------+-----+---------+-------+
5 rows in set (0.02 sec)
```

4.

```
[mysql> select CustomerName from customers;
+--------------+
| CustomerName |
+--------------+
| Monk         |
| mars         |
| johny        |
| mans         |
| Maggie       |
| don          |
| lambie       |
| John         |
| Kens         |
| manish       |
| Kensive      |
| Monk         |
| Maggie       |
| mars         |
| johny        |
| Kelvin       |
+--------------+
16 rows in set (0.01 sec)

[mysql> select * from customers where CustomerName like "%or%";
Empty set (0.00 sec)
```

5.

```
[mysql> insert into products(CustomerID) values(2505);
Query OK, 1 row affected (0.06 sec)
```

6.

```
[mysql> select * from customers where country = 'Germany' && city = 'Berlin';
+------------+-------------+--------+--------------+--------+---------+
| CustomerID | Dateofbirth | Gender | CustomerName | City   | country |
+------------+-------------+--------+--------------+--------+---------+
|       1100 | 1979-01-10  | f      | Kens         | Berlin | Germany |
|       1106 | 1979-01-10  | f      | Kensive      | Berlin | Germany |
+------------+-------------+--------+--------------+--------+---------+
2 rows in set, 1 warning (0.00 sec)
```

7.

```
[mysql> select * from customers where country != 'Germany';
+------------+-------------+--------+--------------+-----------+---------+
| CustomerID | Dateofbirth | Gender | CustomerName | City      | country |
+------------+-------------+--------+--------------+-----------+---------+
|         12 | 1996-11-10  | m      | Monk         | Hyderabad | India   |
|         15 | 1972-08-10  | f      | mars         | goa       | India   |
|         20 | 1966-03-29  | f      | johny        | paris     | france  |
|        125 | 1999-12-10  | m      | Maggie       | Delhi     | India   |
|        150 | 1991-12-10  | f      | don          | Oslo      | Norway  |
|        200 | 1968-11-29  | f      | lambie       | paris     | france  |
|       1000 | 1989-10-10  | m      | John         | Delhi     | India   |
|       1105 | 1989-10-10  | m      | manish       | Delhi     | India   |
|       1205 | 1998-11-10  | m      | Monk         | Delhi     | India   |
|       1259 | 1999-12-10  | m      | Maggie       | Delhi     | India   |
|       1507 | 1992-08-10  | f      | mars         | Oslo      | norway  |
|       2004 | 1966-03-29  | f      | johny        | paris     | france  |
+------------+-------------+--------+--------------+-----------+---------+
12 rows in set (0.00 sec)
```

8.

```
mysql> select City from customers;
+-----------+
| City      |
+-----------+
| Hyderabad |
| goa       |
| paris     |
| Hamburg   |
| Delhi     |
| Oslo      |
| paris     |
| Delhi     |
| Berlin    |
| Delhi     |
| Berlin    |
| Delhi     |
| Delhi     |
| Oslo      |
| paris     |
| Hamburg   |
+-----------+
16 rows in set (0.00 sec)

mysql> select * from customers where City like 'a%';
Empty set (0.00 sec)
```

9.

```
mysql> select * from customers where City like 'a%b';
Empty set (0.00 sec)
```

10.

```
[mysql> select * from customers where City not like 'a%';
+------------+------------+--------+--------------+-----------+---------+
| CustomerID | Dateofbirth | Gender | CustomerName | City      | country |
+------------+------------+--------+--------------+-----------+---------+
|         12 | 1996-11-10 | m      | Monk         | Hyderabad | India   |
|         15 | 1972-08-10 | f      | mars         | goa       | India   |
|         20 | 1966-03-29 | f      | johny        | paris     | france  |
|         25 | 1944-03-10 | f      | mans         | Hamburg   | Germany |
|        125 | 1999-12-10 | m      | Maggie       | Delhi     | India   |
|        150 | 1991-12-10 | f      | don          | Oslo      | Norway  |
|        200 | 1968-11-29 | f      | lambie       | paris     | france  |
|       1000 | 1989-10-10 | m      | John         | Delhi     | India   |
|       1100 | 1979-01-10 | f      | Kens         | Berlin    | Germany |
|       1105 | 1989-10-10 | m      | manish       | Delhi     | India   |
|       1106 | 1979-01-10 | f      | Kensive      | Berlin    | Germany |
|       1205 | 1998-11-10 | m      | Monk         | Delhi     | India   |
|       1259 | 1999-12-10 | m      | Maggie       | Delhi     | India   |
|       1507 | 1992-08-10 | f      | mars         | Oslo      | norway  |
|       2004 | 1966-03-29 | f      | johny        | paris     | france  |
|       2505 | 1960-03-10 | f      | Kelvin       | Hamburg   | Germany |
+------------+------------+--------+--------------+-----------+---------+
16 rows in set (0.00 sec)
```

11.

```
[mysql>
[mysql> select * from customers where City like 'a%' or 'c%' or 's%';
Empty set, 2 warnings (0.01 sec)
```

12.

```
[mysql> select * from customers where City like 'a%' or City like 'b%' or City like 'c%' or City lik]
e 'd%' or City like 'e%' or City like 'f%';
+------------+------------+--------+--------------+--------+---------+
| CustomerID | Dateofbirth | Gender | CustomerName | City   | country |
+------------+------------+--------+--------------+--------+---------+
|        125 | 1999-12-10 | m      | Maggie       | Delhi  | India   |
|       1000 | 1989-10-10 | m      | John         | Delhi  | India   |
|       1100 | 1979-01-10 | f      | Kens         | Berlin | Germany |
|       1105 | 1989-10-10 | m      | manish       | Delhi  | India   |
|       1106 | 1979-01-10 | f      | Kensive      | Berlin | Germany |
|       1205 | 1998-11-10 | m      | Monk         | Delhi  | India   |
|       1259 | 1999-12-10 | m      | Maggie       | Delhi  | India   |
+------------+------------+--------+--------------+--------+---------+
7 rows in set (0.00 sec)
```

13.

```
[mysql> select * from customers where country != 'Norway' && country != 'France';
+------------+------------+--------+--------------+-----------+---------+
| CustomerID | Dateofbirth | Gender | CustomerName | City      | country |
+------------+------------+--------+--------------+-----------+---------+
|         12 | 1996-11-10 | m      | Monk         | Hyderabad | India   |
|         15 | 1972-08-10 | f      | mars         | goa       | India   |
|         25 | 1944-03-10 | f      | mans         | Hamburg   | Germany |
|        125 | 1999-12-10 | m      | Maggie       | Delhi     | India   |
|       1000 | 1989-10-10 | m      | John         | Delhi     | India   |
|       1100 | 1979-01-10 | f      | Kens         | Berlin    | Germany |
|       1105 | 1989-10-10 | m      | manish       | Delhi     | India   |
|       1106 | 1979-01-10 | f      | Kensive      | Berlin    | Germany |
|       1205 | 1998-11-10 | m      | Monk         | Delhi     | India   |
|       1259 | 1999-12-10 | m      | Maggie       | Delhi     | India   |
|       2505 | 1960-03-10 | f      | Kelvin       | Hamburg   | Germany |
+------------+------------+--------+--------------+-----------+---------+
11 rows in set, 1 warning (0.00 sec)
```

14.

```
[mysql> select * from products where ProductName between 'Hat' and 'Pen';
+------------+-----------+-------------+--------------+-------+
| CustomerID | ProductID | ProductName | Availability | Price |
+------------+-----------+-------------+--------------+-------+
|          1 |      1000 | pen         | yes          |   100 |
|          6 |       200 | hat         | yes          |    10 |
+------------+-----------+-------------+--------------+-------+
2 rows in set (0.01 sec)
```

15.

```
[mysql> select * from products where Price between 50 and 100;
+------------+-----------+-------------+--------------+-------+
| CustomerID | ProductID | ProductName | Availability | Price |
+------------+-----------+-------------+--------------+-------+
|          1 |      1000 | pen         | yes          |   100 |
|          4 |      1205 | duck        | yes          |    50 |
|          7 |      2505 | pot         | no           |    90 |
+------------+-----------+-------------+--------------+-------+
3 rows in set (0.00 sec)
```

16.

```
[mysql> alter table products drop foreign key products_ibfk_1;
Query OK, 0 rows affected (0.04 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

```
[mysql> alter table customers drop primary key;
Query OK, 16 rows affected (0.03 sec)
Records: 16  Duplicates: 0  Warnings: 0
```

17.

```
[mysql> delete from customers where country='Brazil' && City='Victoria';
Query OK, 0 rows affected, 1 warning (0.00 sec)
```

18.

```
[mysql> select ProductName, Availability, Price from products where price<50;
+-------------+--------------+-------+
| ProductName | Availability | Price |
+-------------+--------------+-------+
| toy         | no           |    10 |
| pencil      | yes          |    30 |
| hat         | yes          |    10 |
| chalk       | no           |    10 |
+-------------+--------------+-------+
4 rows in set (0.00 sec)
```

19.

```
[mysql> select * from customers where City!='Delhi' and City!='Hamburg';
+------------+-------------+--------+--------------+-----------+---------+
| CustomerID | Dateofbirth | Gender | CustomerName | City      | country |
+------------+-------------+--------+--------------+-----------+---------+
|         12 | 1996-11-10  | m      | Monk         | Hyderabad | India   |
|         15 | 1972-08-10  | f      | mars         | goa       | India   |
|         20 | 1966-03-29  | f      | johny        | paris     | france  |
|        150 | 1991-12-10  | f      | don          | Oslo      | Norway  |
|        200 | 1968-11-29  | f      | lambie       | paris     | france  |
|       1100 | 1979-01-10  | f      | Kens         | Berlin    | Germany |
|       1106 | 1979-01-10  | f      | Kensive      | Berlin    | Germany |
|       1507 | 1992-08-10  | f      | mars         | Oslo      | norway  |
|       2004 | 1966-03-29  | f      | johny        | paris     | france  |
+------------+-------------+--------+--------------+-----------+---------+
9 rows in set (0.00 sec)
```

20.

```
[mysql> select CustomerName from customers where year(curdate()) - year(Dateofbirth) >18;
+--------------+
| CustomerName |
+--------------+
| Monk         |
| mars         |
| johny        |
| mans         |
| Maggie       |
| don          |
| lambie       |
| John         |
| Kens         |
| manish       |
| Kensive      |
| Monk         |
| Maggie       |
| mars         |
| johny        |
| Kelvin       |
+--------------+
16 rows in set (0.03 sec)
```