Activity 2:

Single table queries

Create the "**product**" table, which we talked in the class (please refer to ch3).

```
create database Company;
create table Product
(
    PName        varchar(255) primary key,
    Price        float default 0.0 check ( Price >= 0 ),
    Category     varchar(255) not null,
    Manufacturer varchar(255) not null
);
insert into Product values ('Gizmo',19.99,'Gadgets','GizmoWorks');
insert into Product values
('Powergizmo',29.99,'Gadgets','GizmoWorks');
insert into Product values
('SingleTouch',149.99,'Photography','Canon');
insert into Product values
('MultiTouch',203.99,'Household','Hitachi');
```

Show all records of the products table:

Write your query here:

In [1]:

```
select * from Product;
```

Show the output here:

Out [1]:

```
MariaDB [Company]> select * from Product;
+-------------+--------+-------------+--------------+
| PName       | Price  | Category    | Manufacturer |
+-------------+--------+-------------+--------------+
| Gizmo       |  19.99 | Gadgets     | GizmoWorks   |
| MultiTouch  | 203.99 | Household   | Hitachi      |
| Powergizmo  |  29.99 | Gadgets     | GizmoWorks   |
| SingleTouch | 149.99 | Photography | Canon        |
+-------------+--------+-------------+--------------+
4 rows in set (0.000 sec)
```

Exercise #1

Try writing a query to get an output table of all the products with "Touch" in the name, showing just their name and price, and sorted alphabetically by manufacturer.

Write your query here:

In [2]:

```
select PName, Price
from Product
where PName like '%Touch%'
order by Manufacturer;
```

Out [2]:

```
MariaDB [Company]> select PName,Price from Product where PName like '%Touch%' order by Manufacturer;
+-------------+--------+
| PName       | Price  |
+-------------+--------+
| SingleTouch | 149.99 |
| MultiTouch  | 203.99 |
+-------------+--------+
2 rows in set (0.001 sec)
```

Next, write a query that returns the *distinct* names of manufacturers that make products with "Gizmo" in the name:

In [3]:

```
select distinct Manufacturer
from Product
where PName like '%Gizmo%';
```

Out [3]:

```
MariaDB [Company]> select distinct Manufacturer from Product where PName like '%Gizmo%';
+--------------+
| Manufacturer |
+--------------+
| GizmoWorks   |
+--------------+
1 row in set (0.001 sec)
```

Exercise #2:

Try these queries but first guess what they return.

In [4]:

%sql SELECT DISTINCT category FROM product ORDER BY category;

Out [4]:

```
MariaDB [Company]> SELECT DISTINCT category FROM product ORDER BY category;
+-------------+
| category    |
+-------------+
| Gadgets     |
| Household   |
| Photography |
+-------------+
3 rows in set (0.001 sec)
```

In [5]:

%sql SELECT category FROM product ORDER BY pname;

Out[5]:

```
MariaDB [Company]> SELECT category FROM product ORDER BY pname;
+-------------+
| category    |
+-------------+
| Gadgets     |
| Household   |
| Gadgets     |
| Photography |
+-------------+
4 rows in set (0.000 sec)
```

In [6]:

%sql SELECT DISTINCT category FROM product ORDER BY pname;

Out [6]:

```
MariaDB [Company]> SELECT DISTINCT category FROM product ORDER BY pname;
+-------------+
| category    |
+-------------+
| Gadgets     |
| Household   |
| Photography |
+-------------+
3 rows in set (0.001 sec)
```