

## Exercise 1 - Part 2: Running SQL Commands

```
DROP TABLE IF EXISTS "Products";
CREATE TABLE Products
(
  id int NOT NULL,
  title varchar(255),
  price double,
  quantity int,
  category varchar(255),
  supplier varchar(255),
  PRIMARY KEY (id)
);
```

```
DROP TABLE IF EXISTS "Customers";
CREATE TABLE Customers
(
  id int NOT NULL,
  cname varchar(255),
  address varchar(255),
  telephone varchar(255),
  email varchar(255),
  PRIMARY KEY (id)
);
```

```
DROP TABLE IF EXISTS "Suppliers";
CREATE TABLE Suppliers
(
  sid int NOT NULL,
  sup_name varchar(255),
  address varchar(255),
  city varchar(255),
  province varchar(255),
  postal_code varchar(255),
  PRIMARY KEY (sid)
);
```

```
DROP TABLE IF EXISTS "Orders";
CREATE TABLE Orders
(
  order_id int NOT NULL,
  cust_id int,
  order_date varchar(255),
  order_status varchar(255),
  total double,
  PRIMARY KEY (order_id),
  FOREIGN KEY ("cust_id") REFERENCES Customers("id")
);
```

```
);  
  
DROP TABLE IF EXISTS "ItemsPurchased";  
CREATE TABLE ItemsPurchased  
(  
  order_id int NOT NULL,  
  product_id int NOT NULL,  
  quantity int,  
  price double,  
  total double,  
  PRIMARY KEY (order_id, product_id),  
  FOREIGN KEY ("order_id") REFERENCES Orders("order_id"),  
  FOREIGN KEY ("product_id") REFERENCES Products("id")  
);
```

### Exercise 2 - Part 3:

- a. Write a query to list the names of all products available and their quantities**

```
SELECT title, quantity FROM Products;
```

- b. Write a query to list all products that are categorized as 'Hard Drives' with quantities > 4**

```
SELECT title FROM Products  
WHERE category = 'Hard Drives'  
AND quantity > 4;
```

- c. Write a query to list customers who have made any purchase (HINT: Use aliasing to retrieve from multiple tables)**

```
SELECT cname  
FROM Customers AS C, Orders AS O  
WHERE O.cust_id = C.id;
```

- d. Write a query to retrieve the number of products stored as 'Motherboards'**

```
SELECT count (title) FROM Products  
WHERE category = 'Motherboards';
```

- e. Write a query to retrieve the number of products stored as 'Motherboards' and supplied by 'Asus'**

```
SELECT count (title) FROM Products  
WHERE category = 'Motherboards'  
AND supplier = 'Asus';
```

- f. Write a query to list the items purchased by customer 'Mary Brown' (HINT: Use aliasing to select from Customers, Orders, and ItemsPurchased tables).**

```
SELECT title
FROM Products, Customers AS C, Orders AS O, ItemsPurchased AS I
WHERE C.cname = 'Mary Brown'
AND O.cust_id = C.id
AND I.order_id = O.order_id
AND I.product_id = Products.id;
```