Advanced Python Lab 1.

### Objective:

Gain an understanding of object oriented systems design using UML class diagrams to model an application as described in this lab exercise.

### Exercise:

You have been tasked to model an architecture for a new customer, the *Acme Chocolate Company.*

They want an application that meets the following requirements.

1. Keeps track of all the customers in the system. This data includes the following:

Company name

Company address

Company zip code

Company phone number

Company fax number

Company contact person name

2. Keeps track of all orders placed by the customer. The order includes such data as:

Customer who ordered the products.

The date of the order

The date of the delivery.

The shipper used. (Shippers can be Federal Express, DHL or UPS).

The total order price.

3. Keeps track of the order details for each order including:

How many of each product was ordered.

4. Keeps track of the products that the Acme Chocolate Company sells.

4. Keep track of all of the products that Acme Chocolate Company sells. This product list includes the following information

The product name

The product unit price

The amount in stock.

Produce an UML class file that models this application. Make sure that you indicate the cardinality of the relationship between the classes. All class objects should show the attributes for the class as well as the methods that operate on those attributes.