Practice problem on File Input/Output

1. Create a product class with product id, product type, product quantity and the product price as the private member variables.

2. Read the "Intentory.txt" file to create the products with the appropriate quantity and price.

You can use dynamic memory allocation to accomplish the task. For example you an create a pointer array capable of holding say 20 product pointers as in **product *pp[20]**;

Note that here pp is capable of holding address of "products" not the "products" themselves.

Therefore, you can write

pp[0] = new product(id1, type1, q1, p1); // *This will create a product object and store the address to pp[0]*

pp[1] = new product(id2, type2, q2, p2); // *This will create a product object and store the address to pp[1]*

3. Create a method called print() to show the quantity, price, type and id of different products. You can call the print method of the first product object as pp[0]->print(), and so on.

4. Create a function to create invoice based on the customer order. The design of the invoice will depend on you – you can make it as fancy or as mundane as your wish. Make sure you show the relevant information such as the type of the product, the quantity, and the total price in the invoice. This function need not be a member function of the product class. You should be able to print the invoice in a text document.

5. Create a member function update_inventory() to adjust the inventory based on the customer order.

6. Create at least two invoice text files with more than 2 different types of products. Upload the invoices along with the code files (such as .cpp and .h).