**Workshop 6**

- The Customer information includes: customer code, full name, address,  
 email, and phone number.

- The Item information includes: item code, item name, product group, and selling price origin. The item code is a self-incrementing 8-digit integer.

- The product group includes transportation, garments, household appliances, high-tech equipment, and food.

- The Invoice information: each invoice includes an invoice code, which is a self-incrementing 7-digit number, Invoice creation time is taken from system time.

Each invoice belongs to only one customer; an invoice can contain many different items with different quantities.

Each line in the invoice indicates which item was purchased, along with the quantity. The invoice must indicate the total number of items purchased and the total price.

The amount to be paid by the customer is at the bottom of the table.

Define classes accordingly and fulfill the following requirements:

1. Add a new item. show a list of items contained.

2. Add a new customer. show a list of customers.

3. Create an invoice for the selected customer by entering the customer code.

- Enter the purchase information for the items and add them to the invoice.

- After entering, display detailed information about the invoice on the screen.

4. Sort the invoice list by:

a. Customer name (a-z).

b. Total quantity of goods purchased by customers (descending).

c. Total amount to be paid by the customer (decreasing).

5. Search invoices by:

a. customer name.

b. By item name purchased.