Object Oriented Programming

Quiz_1

Question_1

Design a class Numbers that can be used to translate whole dollar amounts in the range 0 through 9999 into an English description of the number. For example, the number 713 would be translated into the string *seven hundred thirteen*, and 8203 would be translated into *eight thousand two hundred three*. The class should have a single integer member variable: int number; and a static array of string objects that specify how to translate key dollar amounts into the desired format. For example, you might use static strings such as string lessThan20[20] = {"zero", "one", ..., "eighteen", "nineteen"};
string hundred = "hundred";
The class should have a constructor that accepts a nonnegative integer and uses it to initialize the Numbers object. It should have a member function print() that prints the English description of the Numbers object. Demonstrate the class by writing a main program that asks the user to enter a number in the proper range and then prints out its English description.
Sample output:

```
Enter a number (0 to 9999): 25
English description: twenty five
```

Question_2

Suppose you are designing a program to model a grocery store's inventory.
Each item has a unique ID, a name, a price, and a quantity. Design a class for representing an item in the grocery store's inventory. The class should getter and setter methods where needed. It should also have a method for displaying the item's details. Additionally, implement a constructor that takes arguments for the item's ID, name, price, and quantity and sets them in the object. Make a default constructor too. And also a destructor (which prints the message object destroyed). The program should first ask the user to enter the total no of items to store, then create an array of Items of that size in main. The main should be a menu-driven program with the following choices:
1). Display Items

2). Update item details
3). Search for items by ID

The above methods should be declared outside the class. There must be functions for all the operations. Display_items() takes the array of objects and should display all the items with their details(ID, Name, Price, Quantity).

2). UpdateItem() should take the item as an argument and further ask whether to update the price or the quantity. And do accordingly in the function. Think whether it should be pass by value or reference.

3). Search for items by ID should take array of items, size, and the ID_NO. If the item is found, display its details, else display “item not found”.