

Khulna University of Engineering & Technology, Khulna 9203, Bangladesh

**Project report of Pharmacy Management  
  
Name: Md. Azfar Hasan**

**Roll:2107101**

**Objectives**To make a management system where we store all the informations like drugs name, drugs id and its prices and storing it in a section and selling to customers with the help of object oriented programming.  
**OOP Components required**1.Classes and object  
2.Inheritance  
3. File Management  
4.Vector(STL)

**Introduction**

The Pharmacy Management System is a C++ program that allows users to manage drugs in a pharmacy store. It provides functionality for both administrators and buyers to perform various operations such as adding drugs, modifying drugs, deleting drugs, viewing drug lists, and generating receipts.

**Features**Admin Menu: Administrators can access the admin menu to perform administrative tasks. Admin username: Azfar101 , password: 1234. Here Administrators have total access to add, modify, delete drugs to their system. Administrators here posses full function to set the name, id and price of the medicine

Buyer Menu: Buyers can access the buyer menu to view drugs and generate a receipt for their purchases.

Add Drug: Administrators can add a new drug to the system by providing details such as drug ID, name, strength/volume, cost, discount, and expiry date.

Modify Drug: Administrators can modify existing drug records by searching for a drug ID and updating its details.

Delete Drug: Administrators can delete a drug record by providing its drug ID.

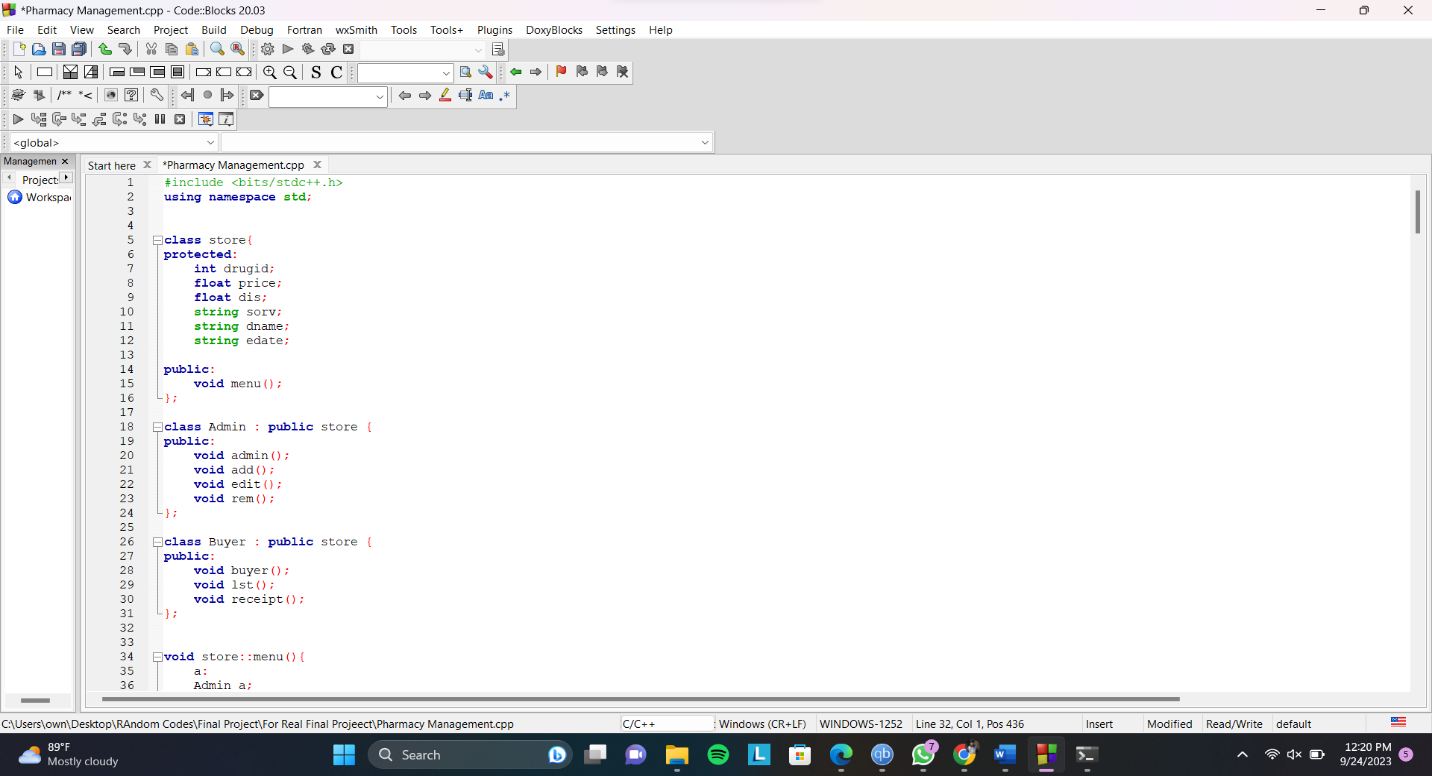
View Drugs: Buyers can view the available drugs in the store.

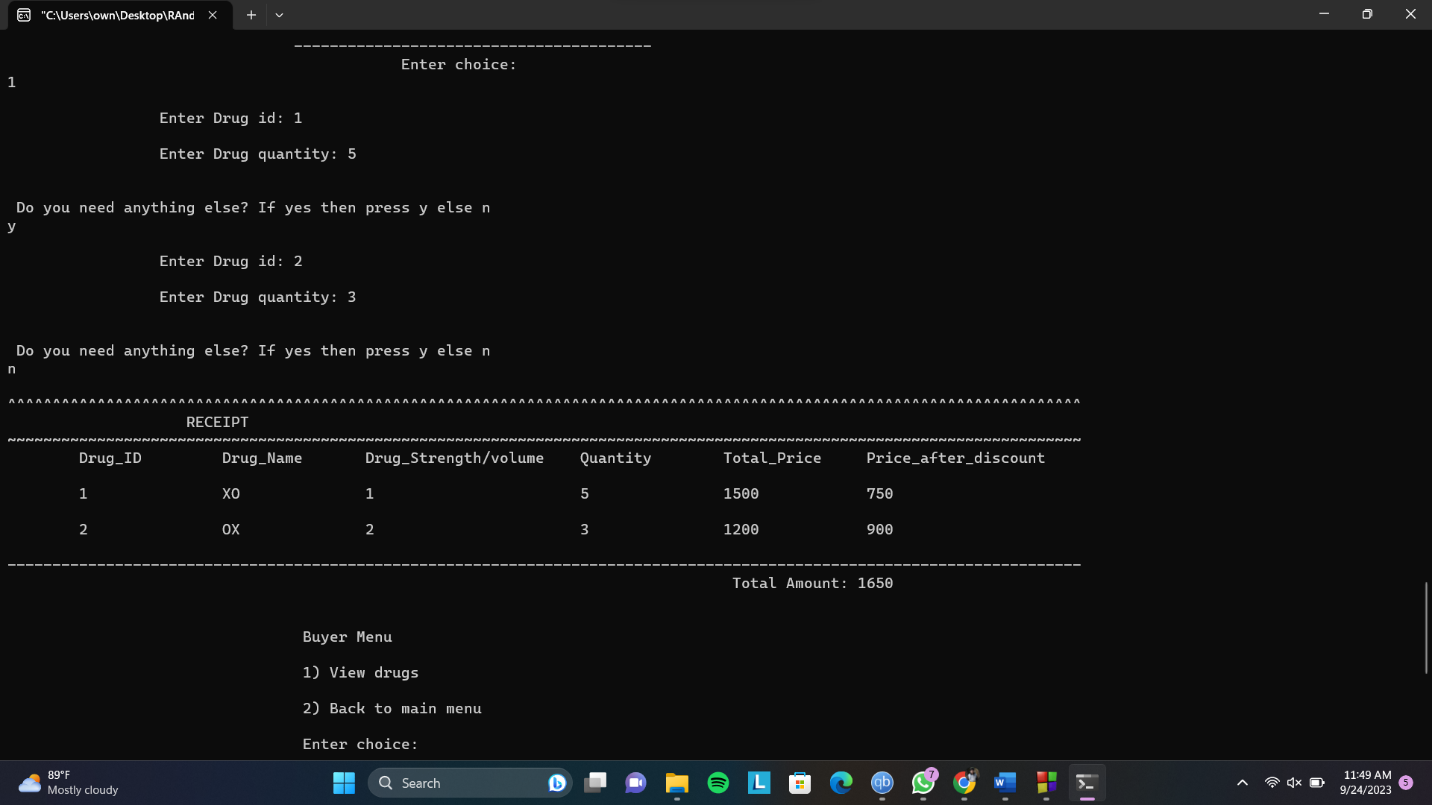
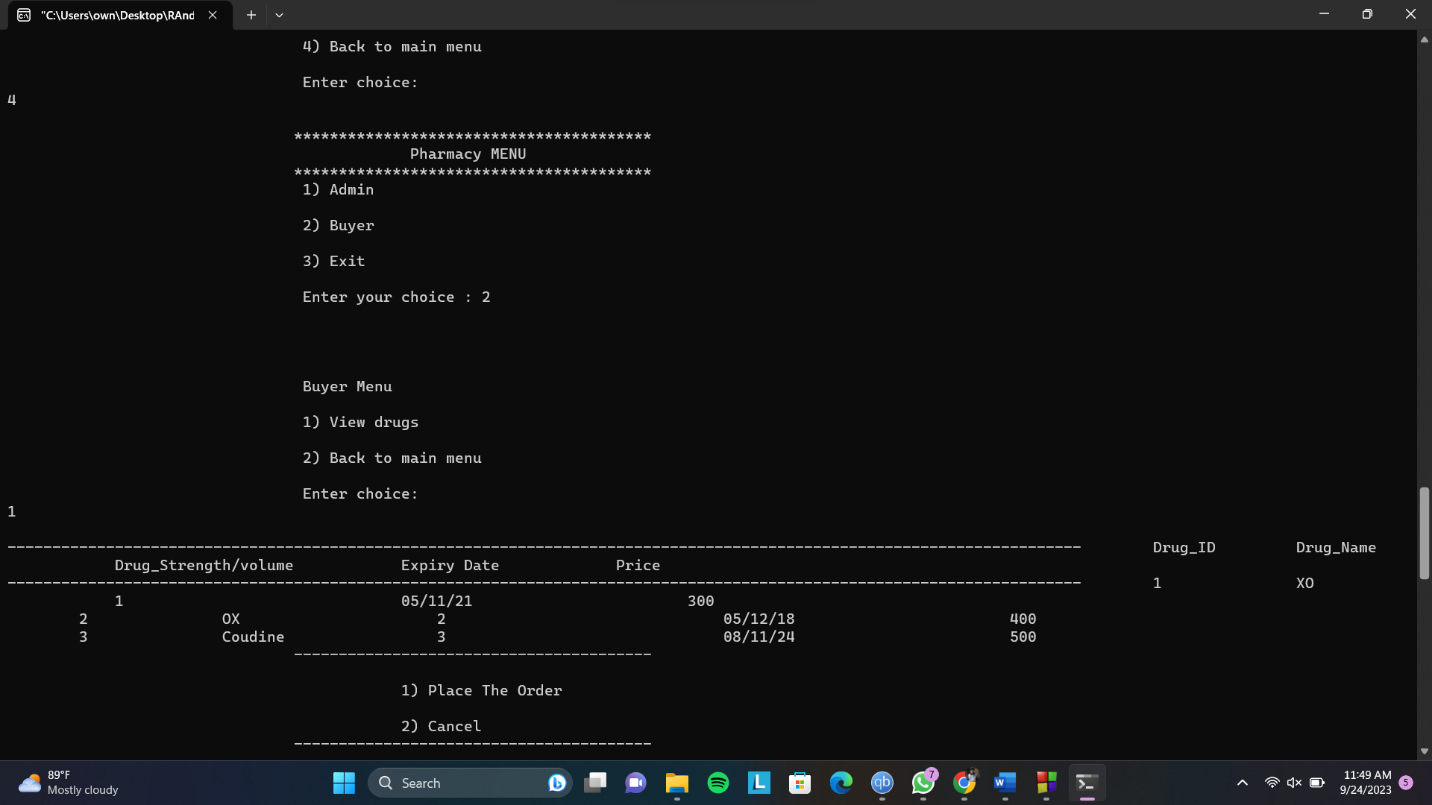
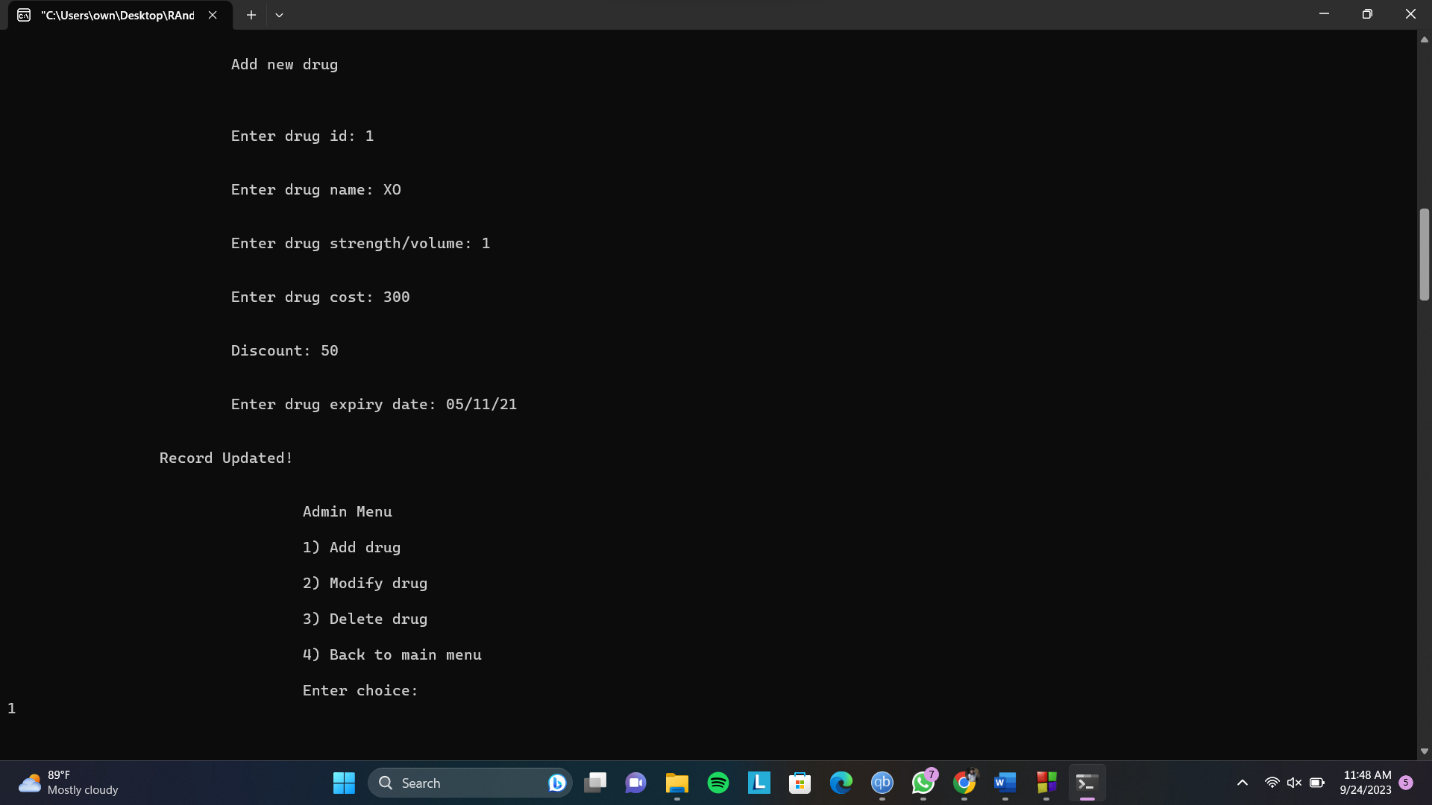
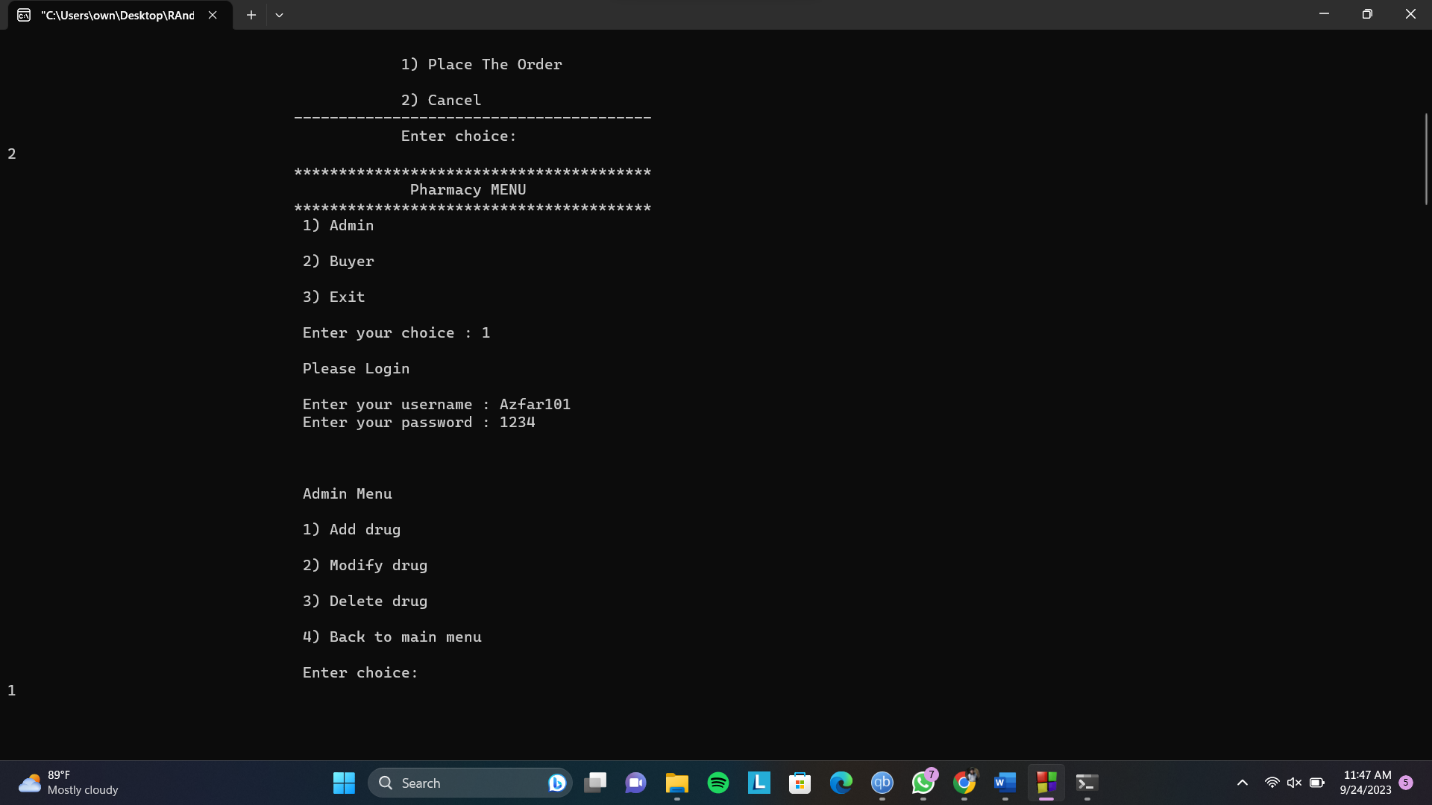
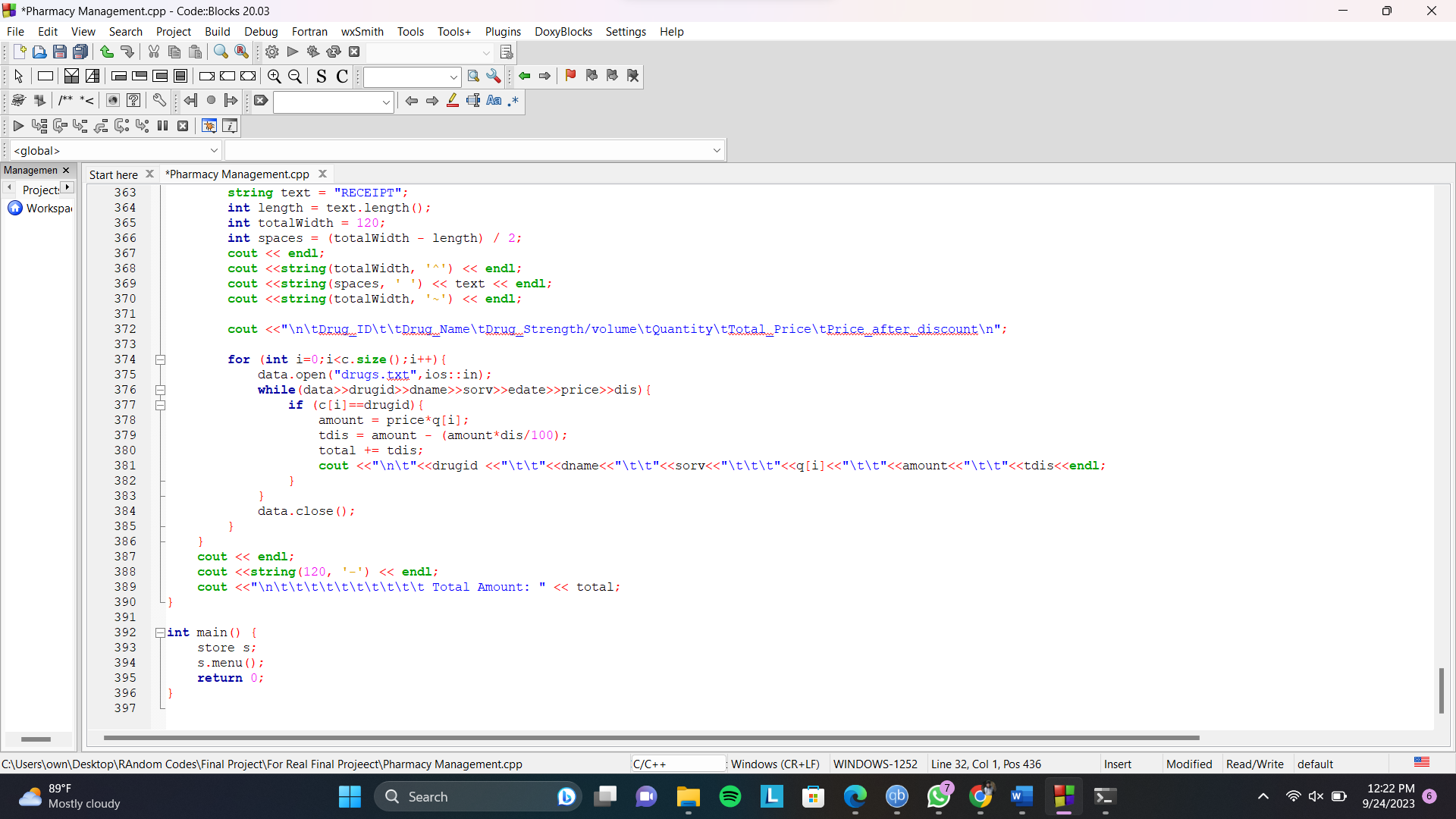
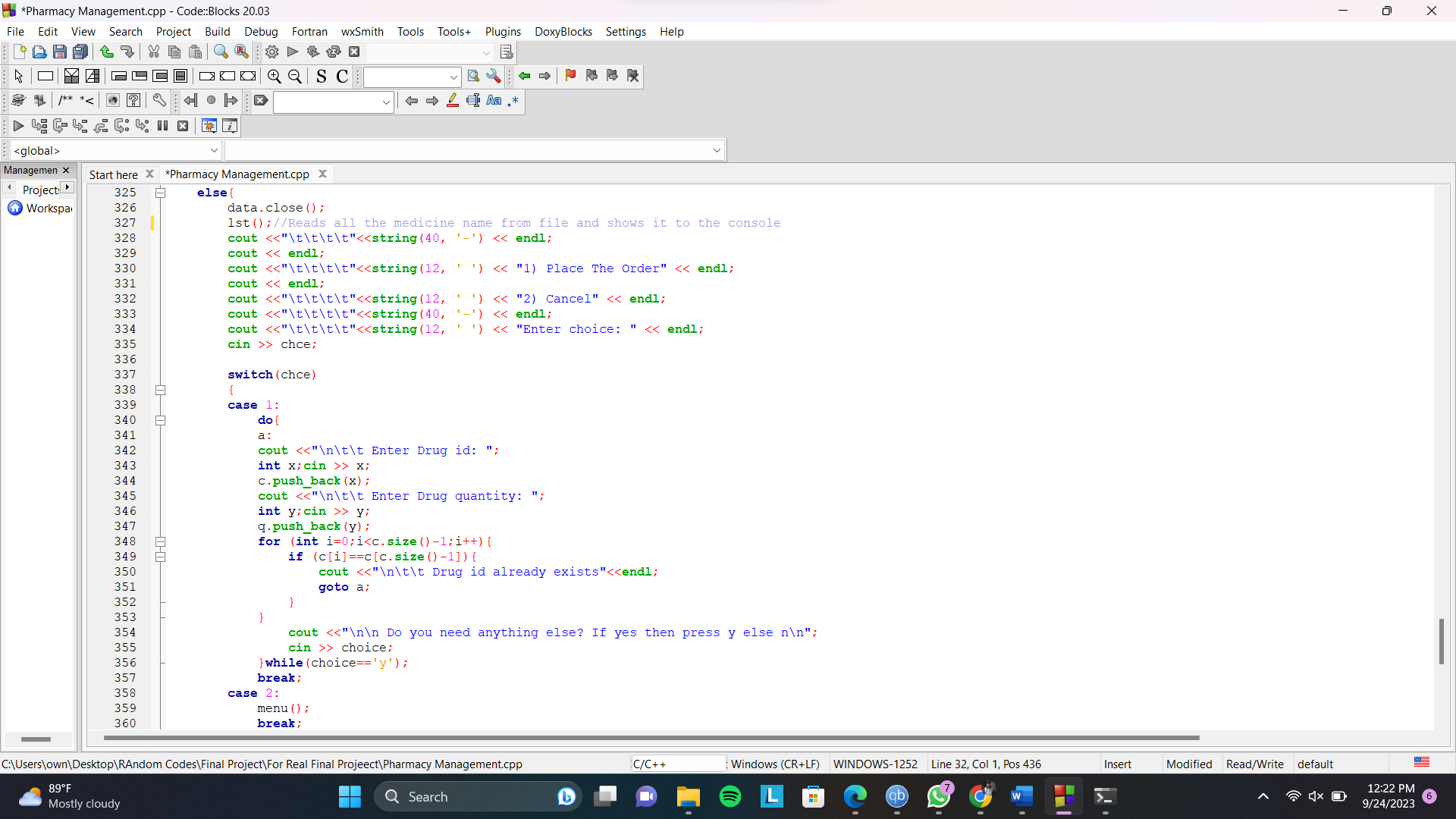
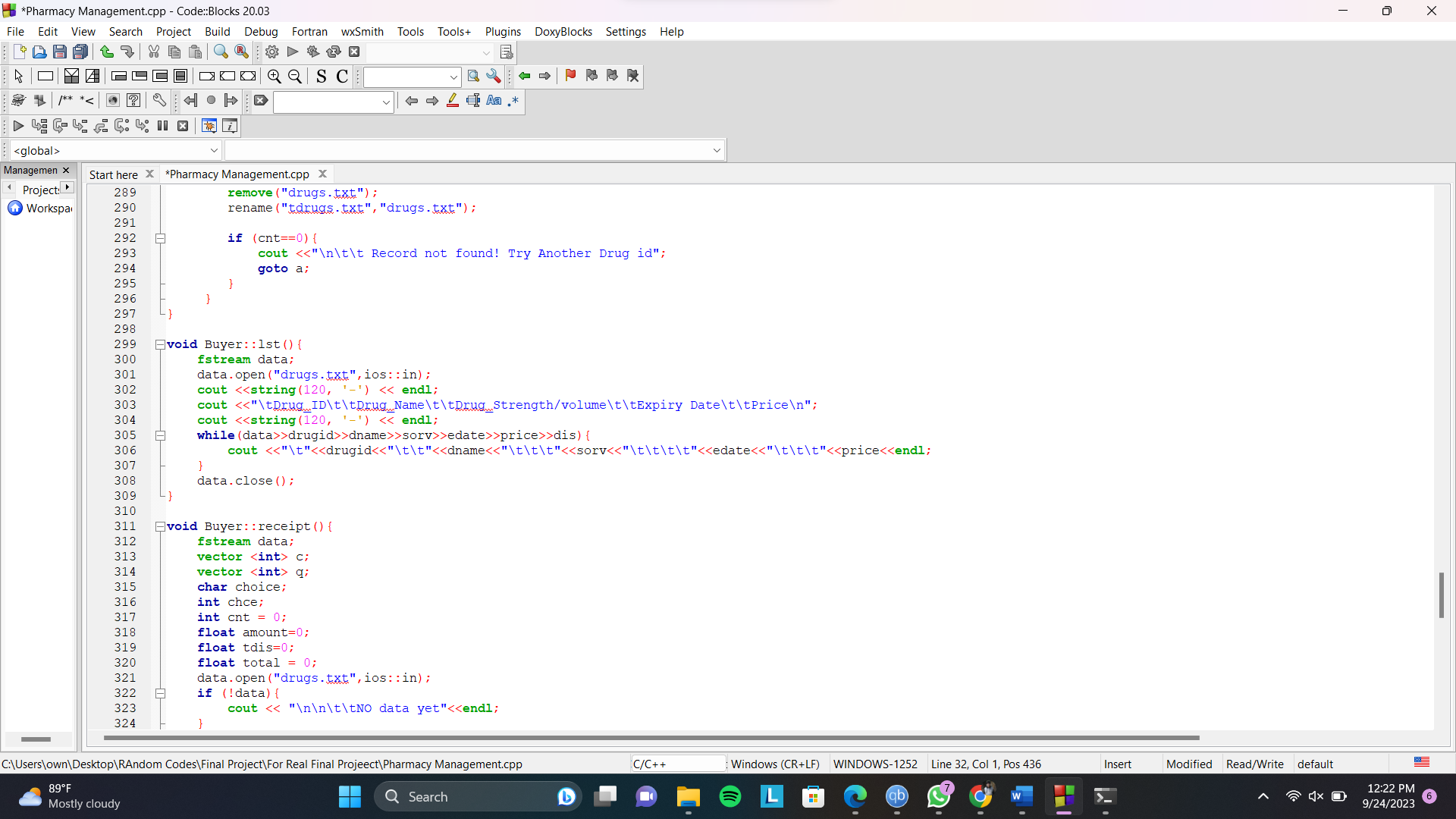
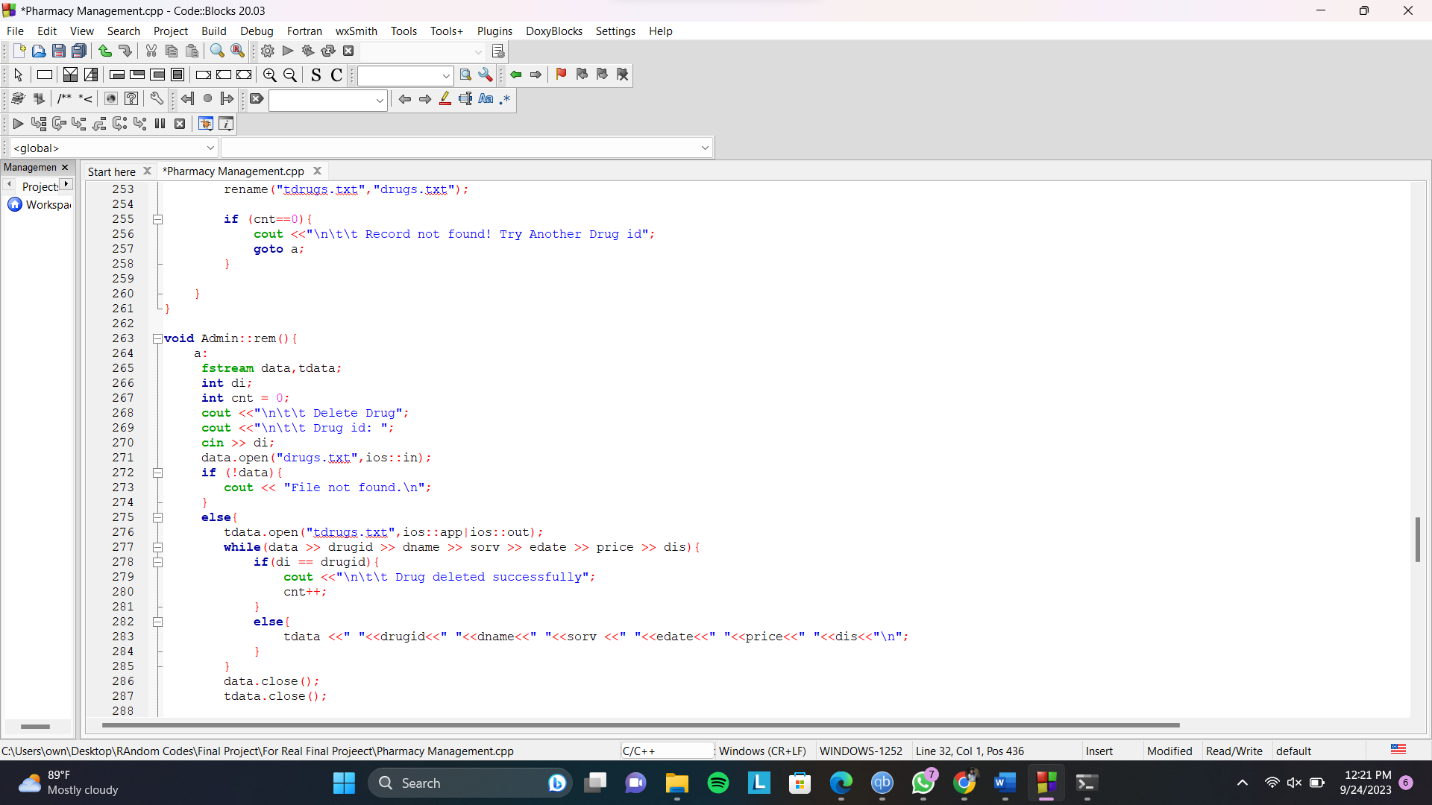
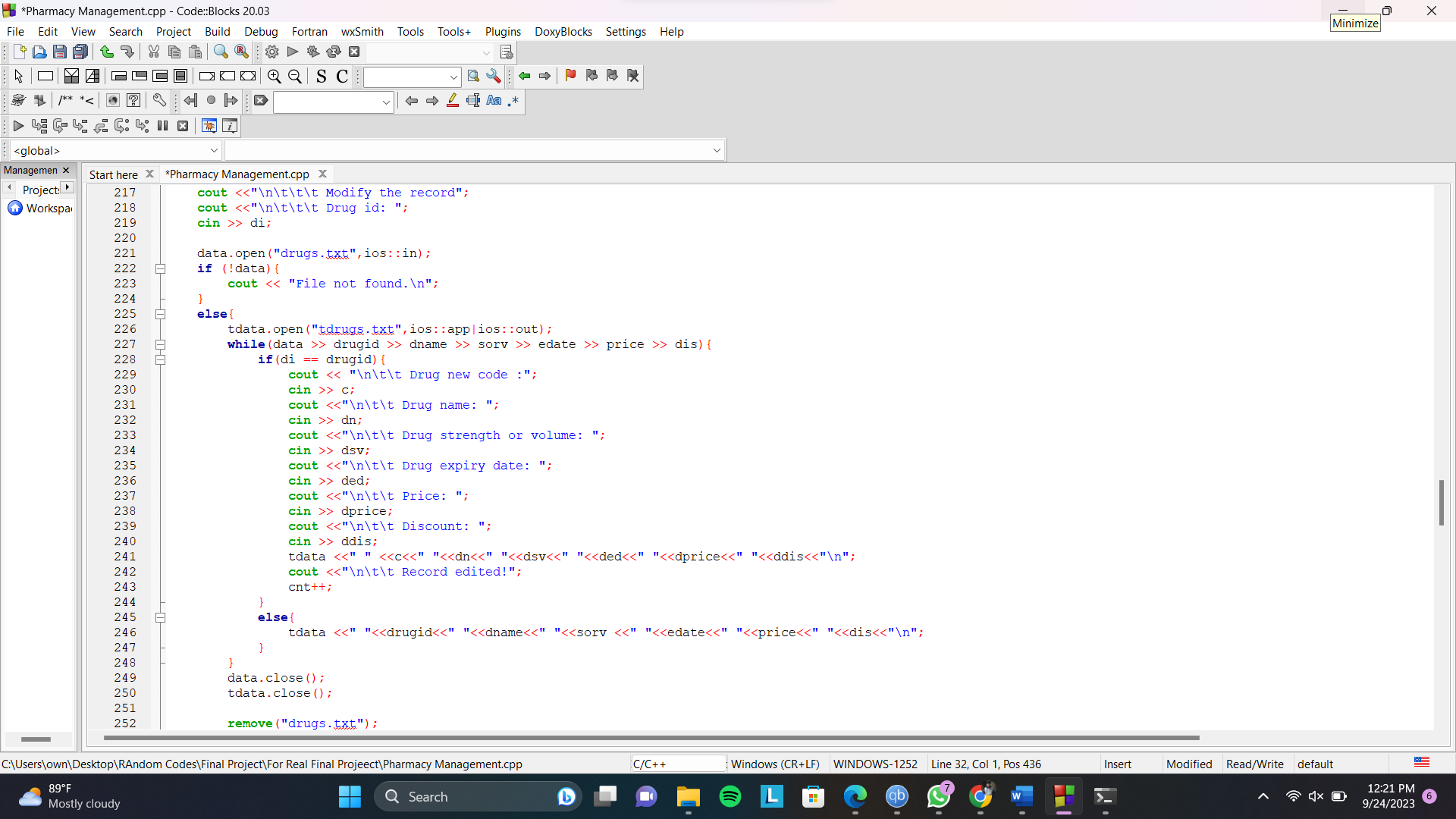
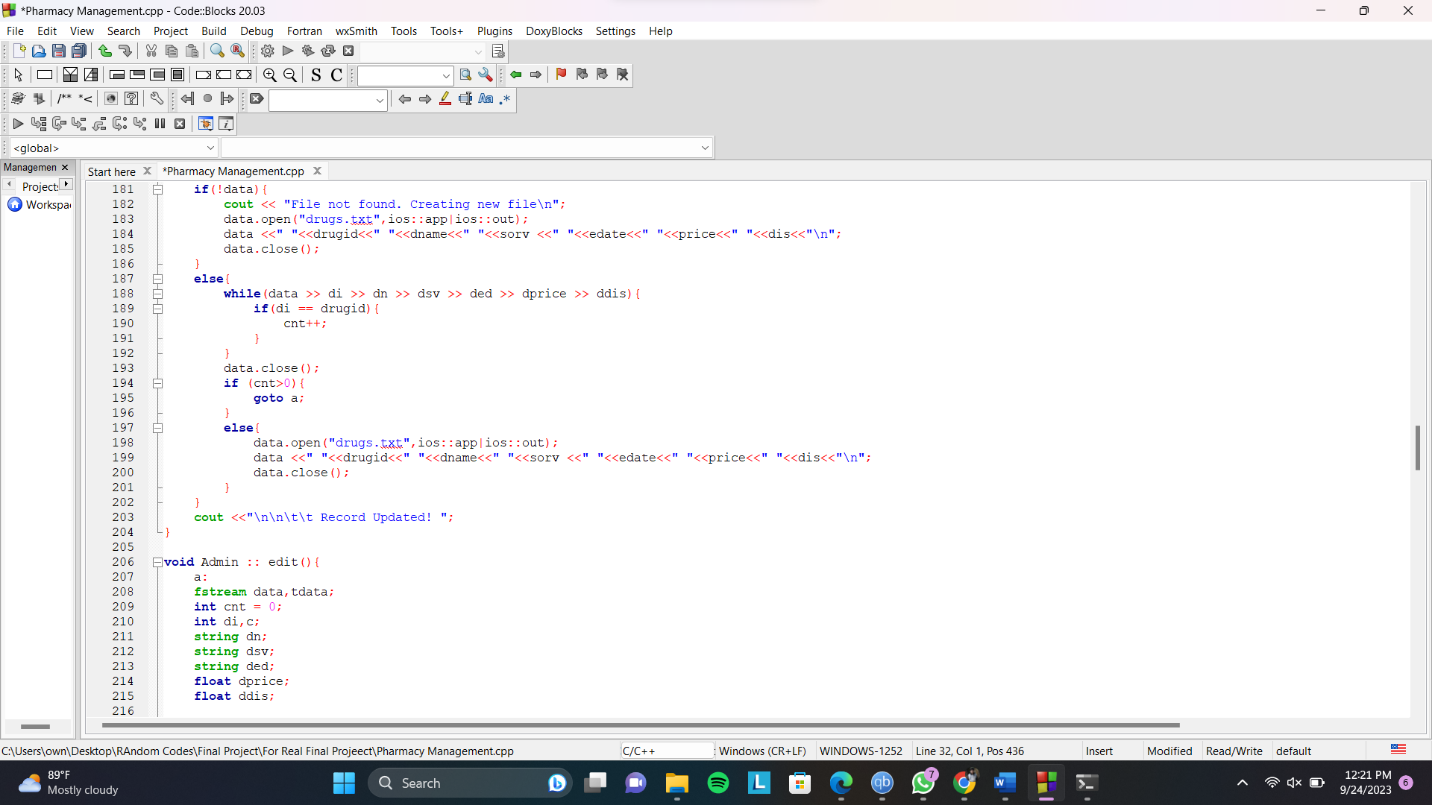
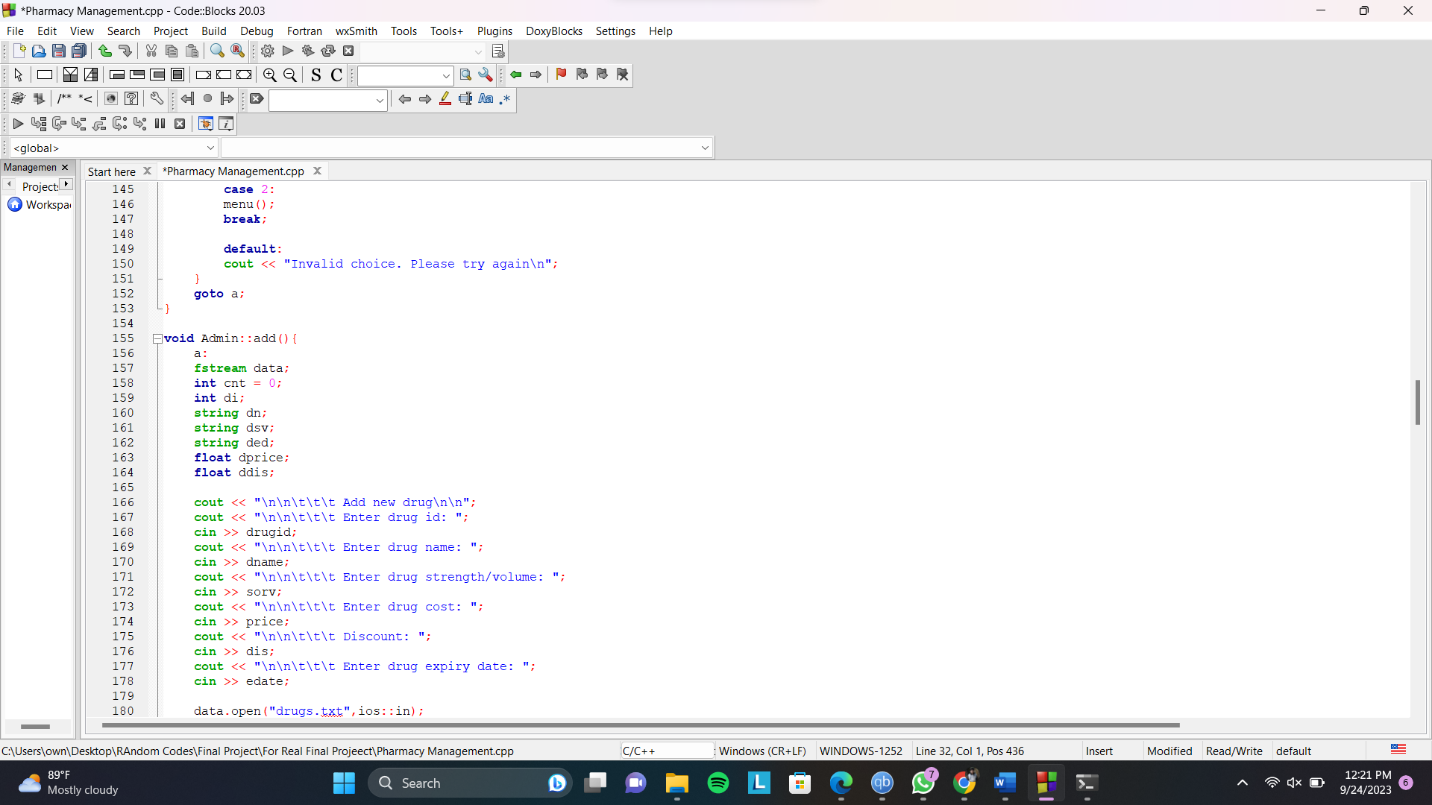
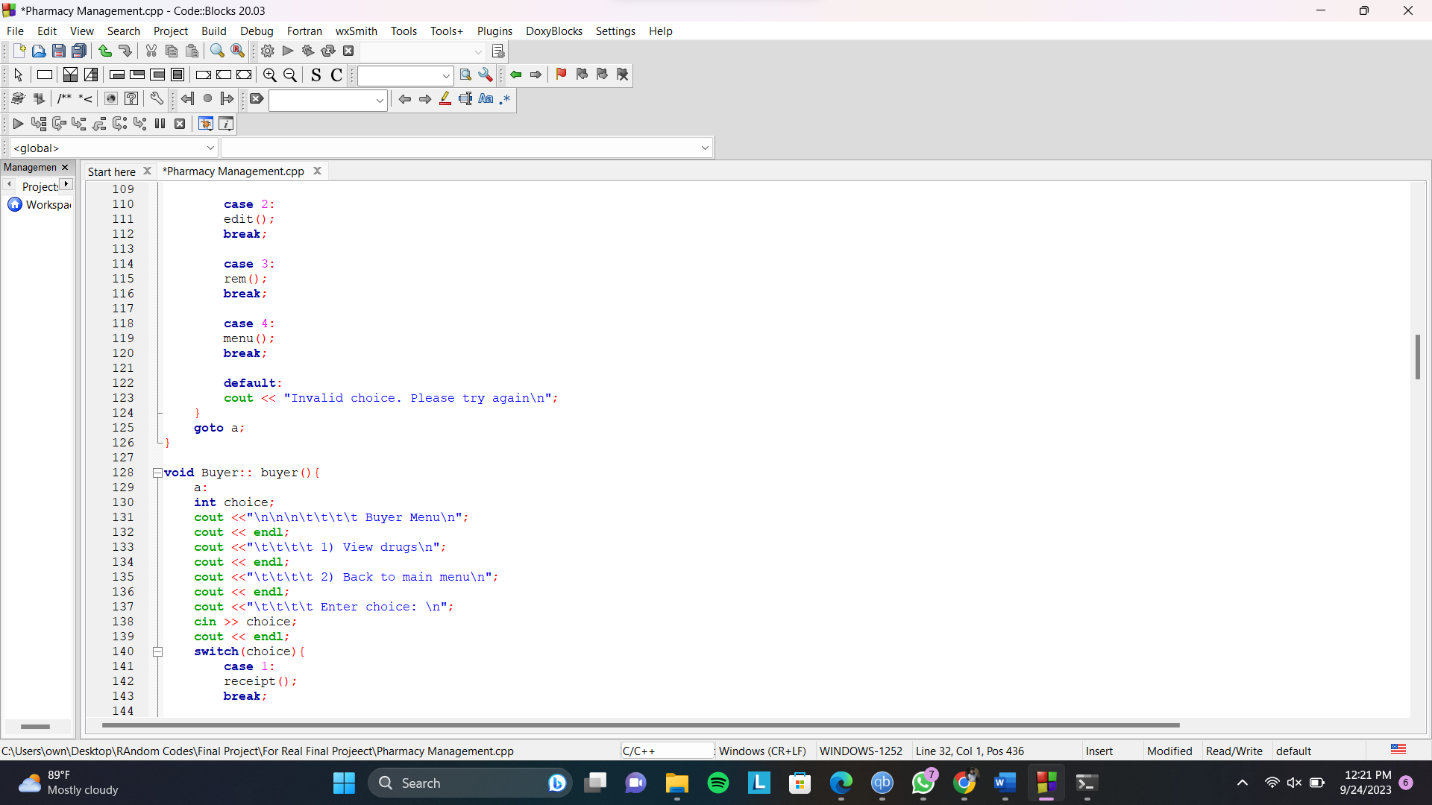
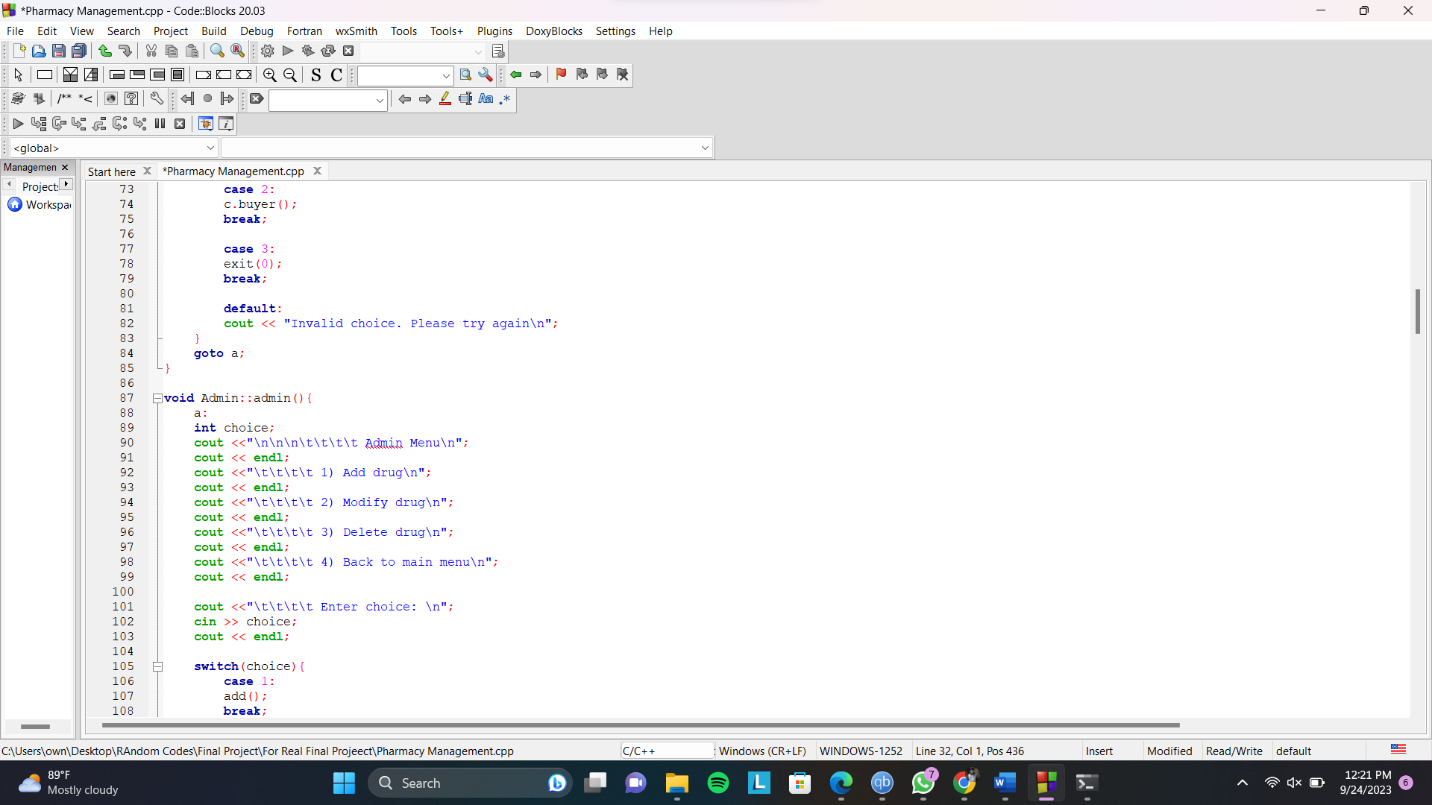
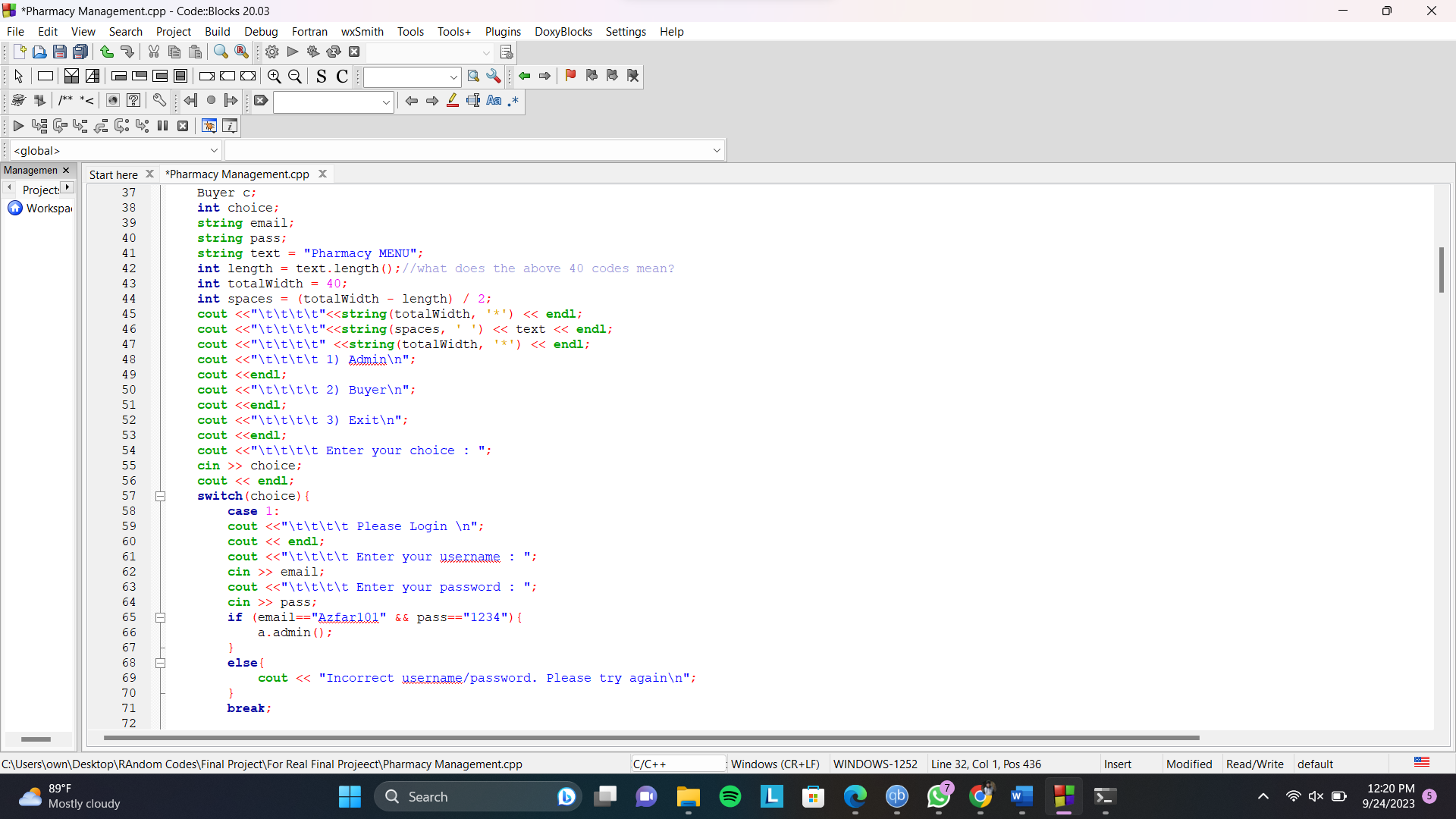
Generate Receipt: Buyers can select drugs and quantities to purchase and generate a receipt with the total amount and discounted prices.  
  
**Classes and It’s working in different places**  
**Store Class:** In this class we’re having the drug id, name, price, discount price and expiry dates as the attributes which means this class was declared to set the details of the medicines name. we also have menu function as public. The menu function basically works like a main menu button. This function is basically used as where direction a user would like to go. At first when we’re declaring this function, it asks a user what role he or she wants to access. If anyone wants to access administrator role, then the function asks for username and password. It shows error when the username or password is incorrect and gives us another chance to login. If a user is successful to login, then we call another object for that case and continue with the proceedings. Same case for buyer choice. If we go for buyer instead of administrator as a choice, the menu function inside the class calls another different object.

**Admin class:** In this class we have 4 functions named admin, add, edit and rem function. The Admin class also inherits store class which means we can easily access the attributes of store class with the use of Admin class. The admin function inside the Admin class is accessed when we enter the system as an administrator. When we implement the function, the console shows us choices like add drugs, Modify drugs, delete drugs and going back to Main Menu. To access all of the choices one by one we need to take an input as a choice and one by one enter different functions inside it to get what we want. This code reads input for various drug attributes from the user, checks if the file "drugs.txt" exists, and either creates it or appends data to it based on whether it exists or not. If the drug ID already exists in the file, it asks the user to enter the information again. There’s also an edit function which at first opens two file named data and tdata and have attributes like cnt(counter),dI(drug Id),dnm( drug name), dsv(drug strength), expiry date, price and discount. It displays a prompt to the user to input the drugID they want to modify and open the drugs.txt file for reading and if it doesn’t exist it informs the user and exists but if it exists it opens a temporary file named “tdrugs.txt” and store modified records. Then it enters a loop to read records from “drugs.txt”. If it finds a record with a matching drugID, it allows the user to input new values for various attributes and writes the modified records to “tdrugs.txt”. It also increments the cnt variable to indicate that a record was edited. If there’s a mismatch with the drugid, it writes the original records to “tdrugs.txt”. After processing all records it closes both “drugs.txt” and “tdrugs.txt” and remove the original “drugs.txt” file and renames “tdrugs.txt” to “drugs.txt” to update the file with modified data. If cnt is still 0, it means no matching record was found and it informs the user to try another drugid. There also exists a rem function whose work is to delete a medicine from the class. Here we also use methods we used in edit function and also asks for the drugID first and delete the medicine details. If the drugID is not matching with one another we print that it’s an error and go through the function again.

**Buyer class:** In the buyer class we have three functions named buyer,lst and receipt. In buyer function we are basically we are basically putting an option for the user to whether to view drugs or go back to main menu if the user goes for view drugs receipt function starts working and there it starts telling which drugs do we need and what amount of drugs do we need and after putting all the inputs we’ll get the amount needed to buy the drugs.

**Code Snippets:**



****