PHARMACY MANAGEMENT SYSTEM

Project by-

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2K18/EP/076

Submitted to-

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ACKNOWLEDGEMENT

I would like to express my gratitude to our Professor, **Mr. Nanhay Singh** who has given us this opportunity to make a project presentation for the course **OPERATING SYSTEM (CO 357)**.

A sincere thanks to Delhi Technological University also, which introduced this innovative project as a scheme of evaluation during such turbulent times. Over the course of our project work we gained immense knowledge which would help us in the coming years.

INTRODUCTION

The Pharmacy management project can be used in variety of medical stores to automate manual process of keeping records and manage inventory and so on. The main purpose of this project is to develop a software application for medical stores to organize their daily activities like billing, stock details, tablet information, etc. The management system uses object oriented programming, classes and objects, file Handling, fundamental Data structures, etc to achieve this.

IMPORTANCE

It requires more time and effort when all procedures in medical stores are performed manually. Thus, in order to reduce time consumption and human effort the Medical Shop this online management System application will be very helpful. As this is an automated system shopkeeper can maintain their records more efficiently and in organized form. Thus, this software helps user to manage day to day activities of Medical store more effectively and efficiently.

MAIN FUNCTIONS OF THE PROGRAM

1. Inventory management

- Adding medicine stock details
- Searching medicine on basis of ID or name
- Editing or deleting medicine stock details

2. Product list display

3. Ordering system

- Adding medicines to order
- Modifying order details
- Deleting orders
- Final bill generation

File Handling

File Handling concept in C++ language is used for store a data permanently in computer. File handling provides a mechanism to store the output of a program in a file and to perform various operations on it. We use file handling in C++ to store medicine stock data in our project and perform different operations on it.

CONCEPTS USED

Classes and objects

The project contains different classes like class Medicine, class Date, etc to store medicine information and date respectively. These classes contain data members and member functions.

Encapsulation

The concept of encapsulation that is the process of combining data members and functions in a single unit is also implemented here using the classes Medicine, Date, etc.

Abstraction

The concept of data abstraction that is displaying only essential information and hiding the details also shown in the project.

CONCEPTS USED

INHERITANCE

The project also uses inheritance in which the child class inherits properties from the base class.

There are two classes class Tablet and class Liquid in the program that inherit the base class Medicine.

Base class member access specifier	Type of Inheritence		
	Public	Protected	Private
Public	Public	Protected	Private
Protected	Protected	Protected	Private
Private	Not accessible (Hidden)	Not accessible (Hidden)	Not accessible (Hidden)

```
class Tablet:public Medicine
{
    private:
        string type;
    public:
        Tablet(string company, string name, int quantity, int id, int price, int day, int month, int year);
        string getType()
        {
            return type;
        }
};
```

```
class Liquid:public Medicine
{
    private:
        string type;
    public:
        Liquid(string company, string name, int quantity, int id, int price, int day, int month, int year);
        string getType()
        {
            return type;
        }
};
```

CONCEPTS USED

Static Data Members

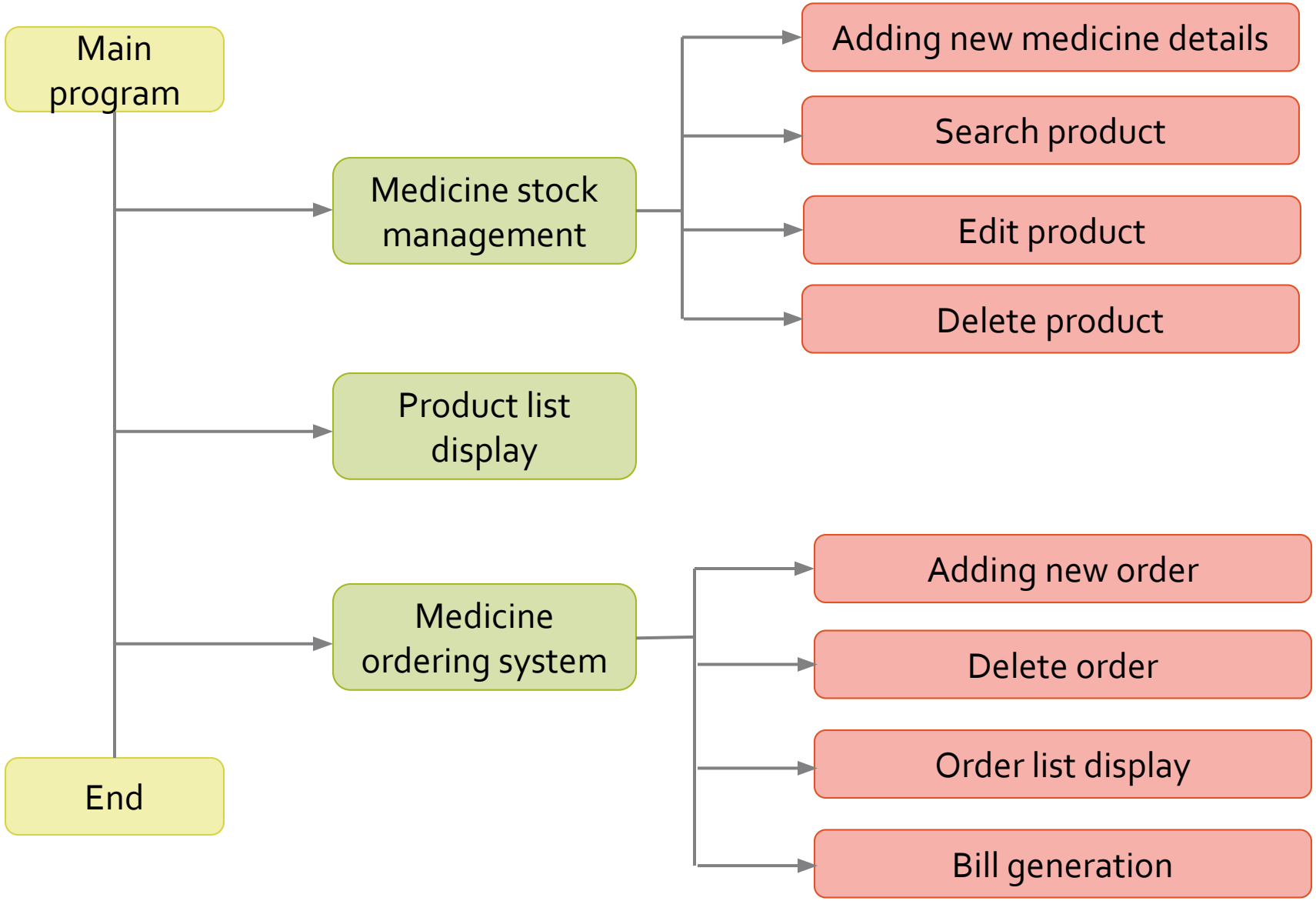
Static data members are class members that are declared using the static keyword. There is only one copy of the static data member in the class, even if there are many class objects. This is because all the objects share the static data member.

For example- I used static variable counter in the Medicine class that stores the number of medicines added.

CONCEPTS USED

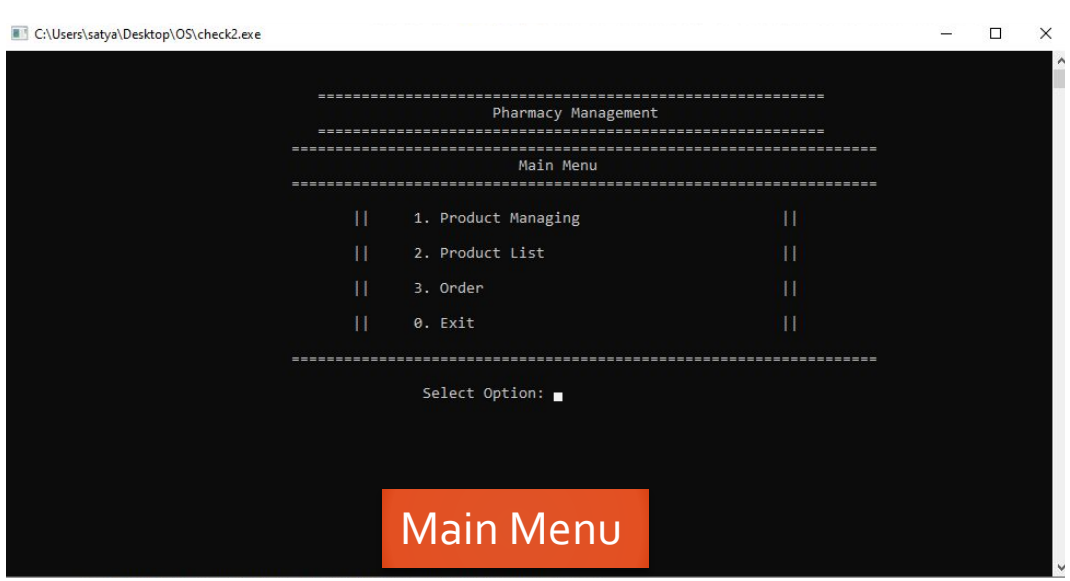
Constructors and Destructors

Constructors are special class functions which performs initialization of every object. The Compiler calls the Constructor whenever an object is created. Whereas, Destructor on the other hand is used to destroy the class object. We use constructors- destructor concept in to initialize the objects of the classes present in the program.

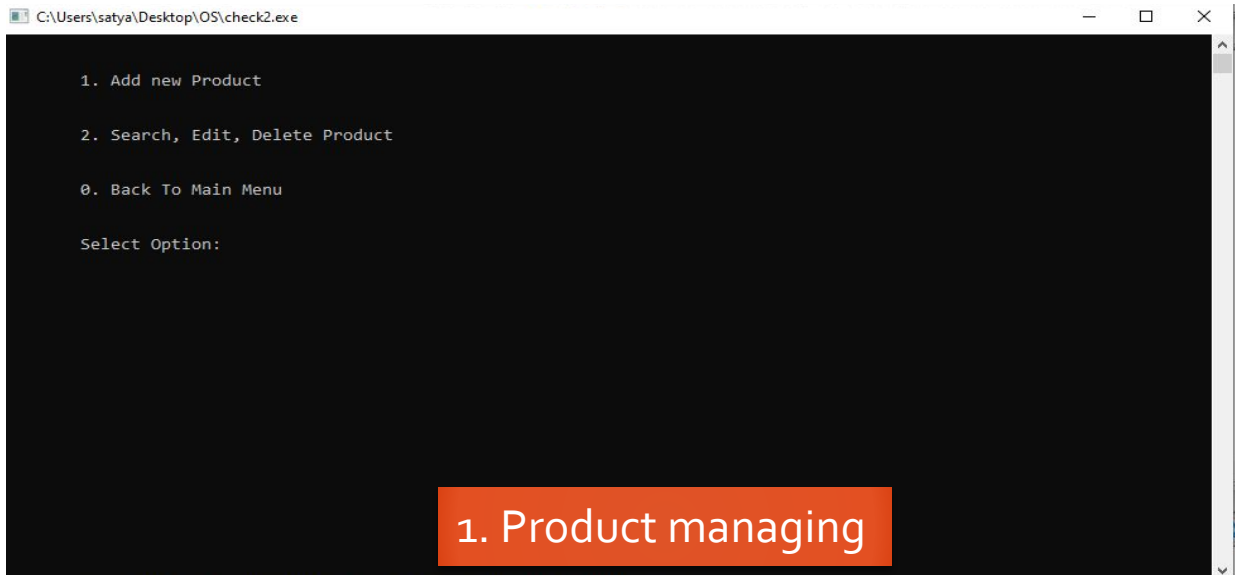


FLOW DIAGRAM

WORKING OF PROJECT

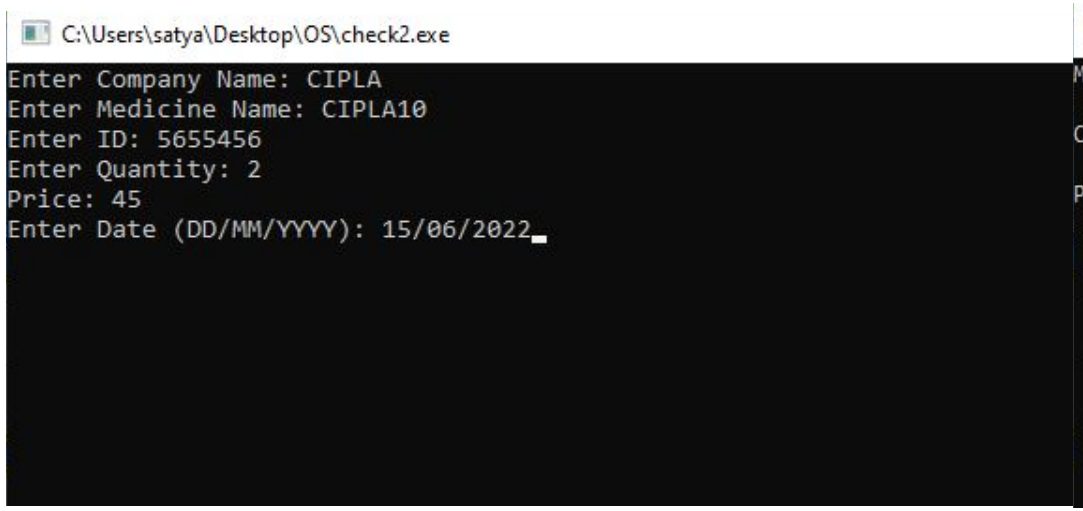


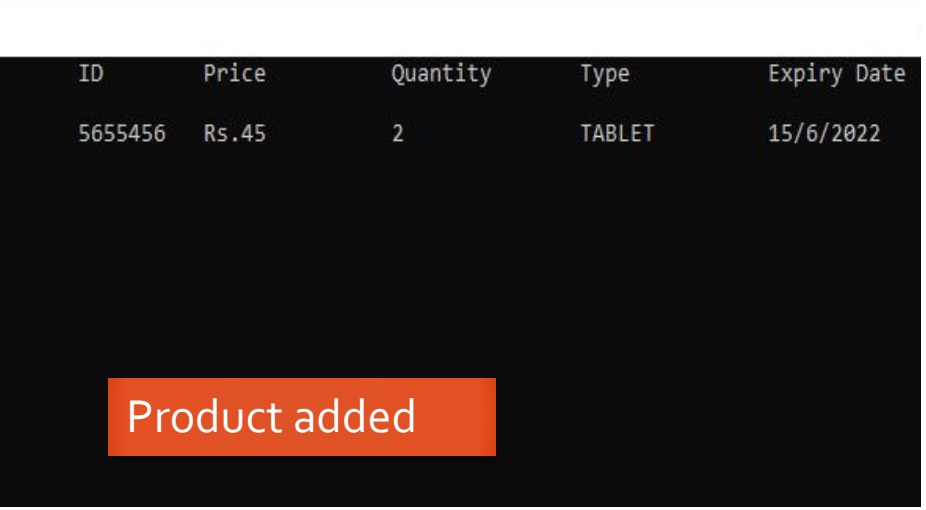
Main Menu



1. Product managing

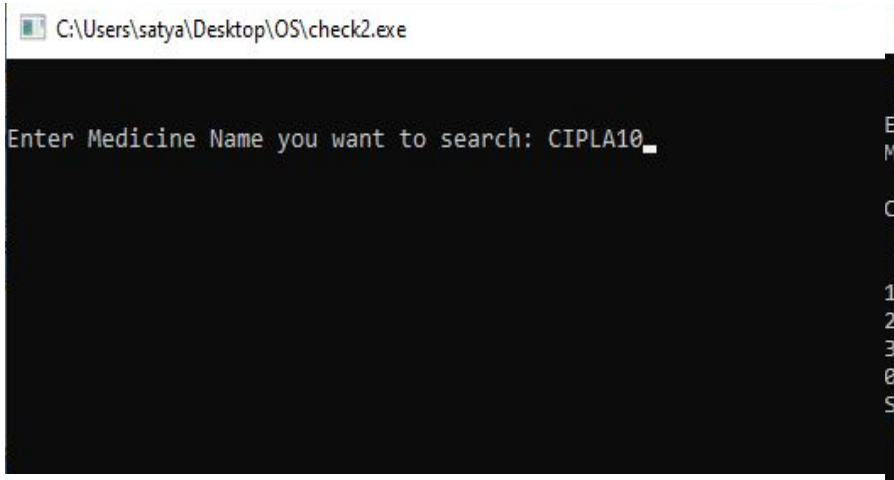
- ## ADDING NEW PRODUCT

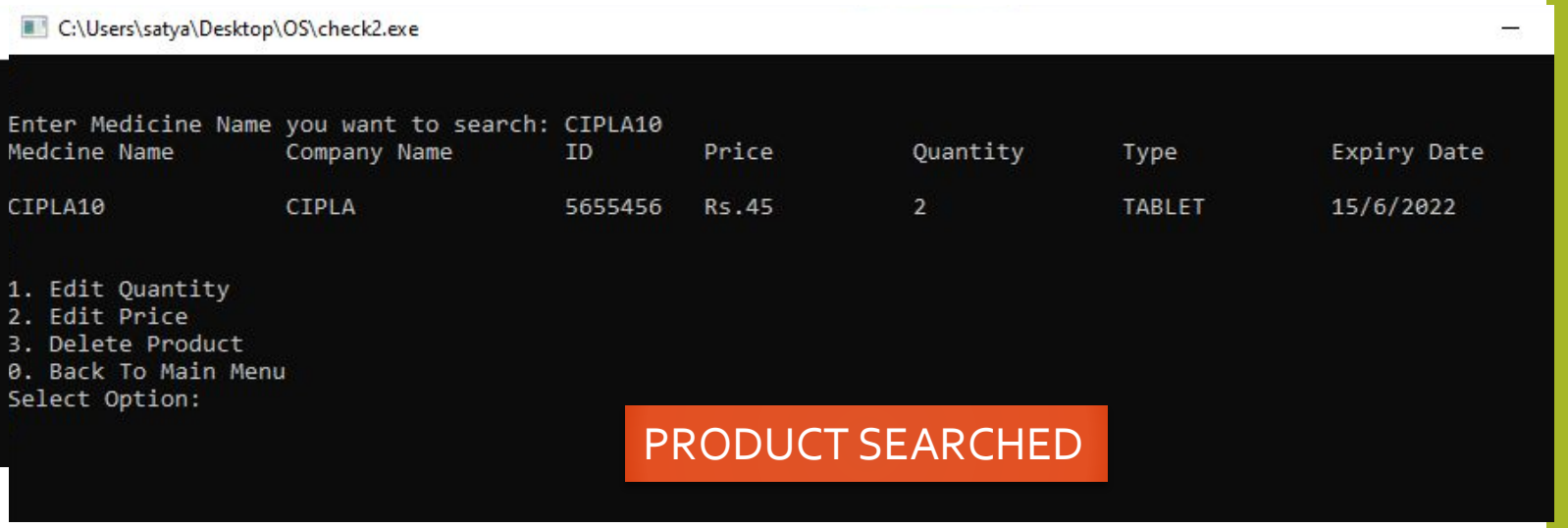




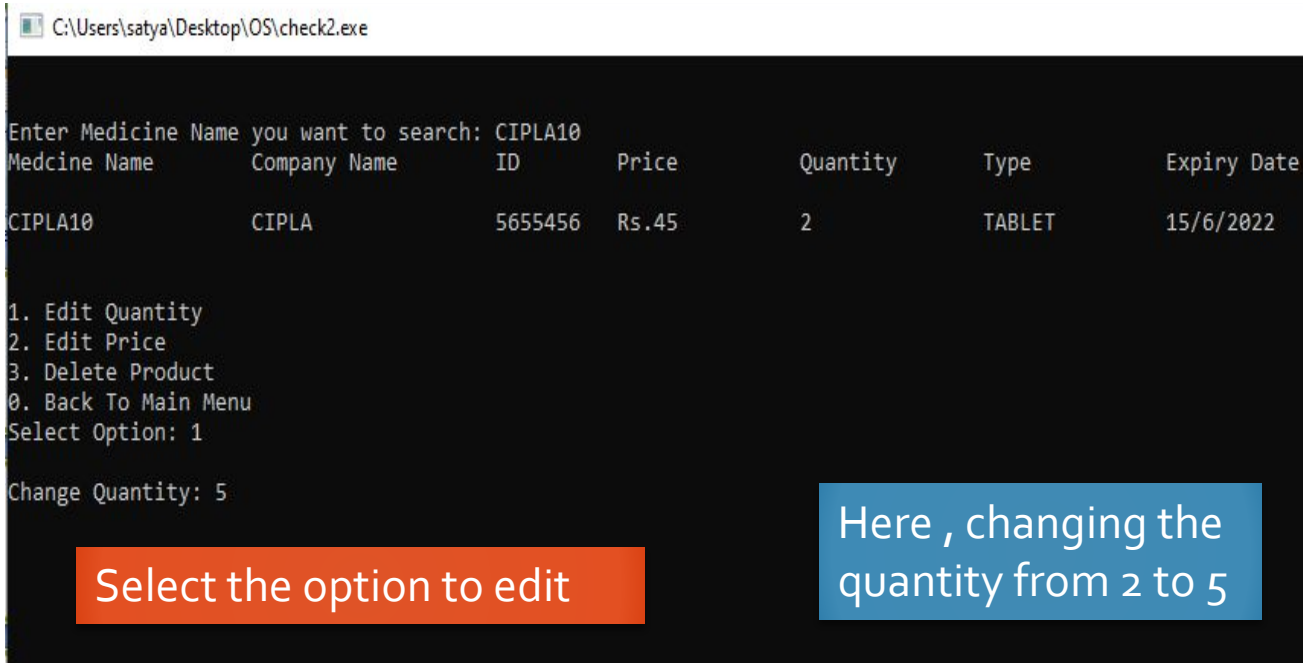
Product added

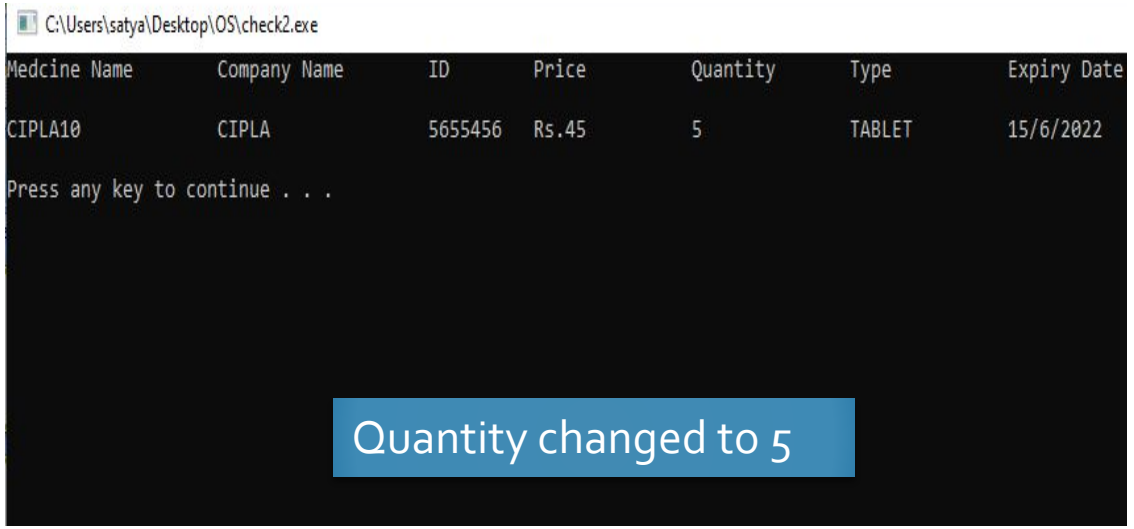
SEARCHING PRODUCT



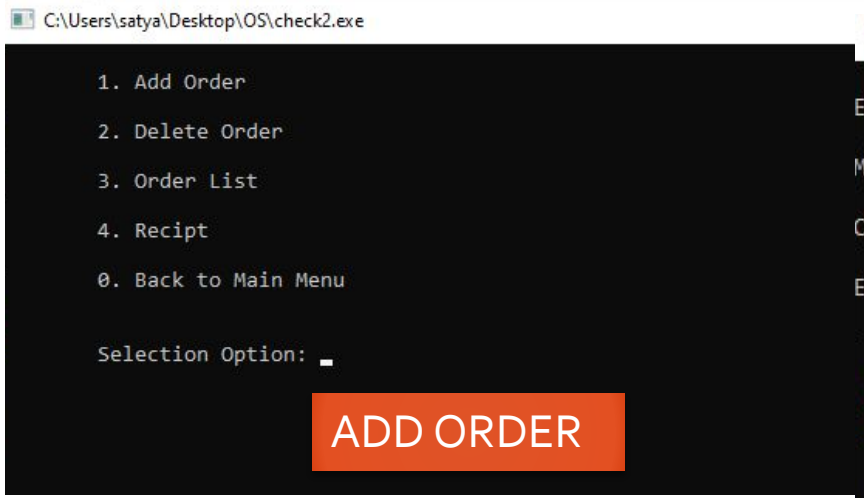


EDITING PRODUCT

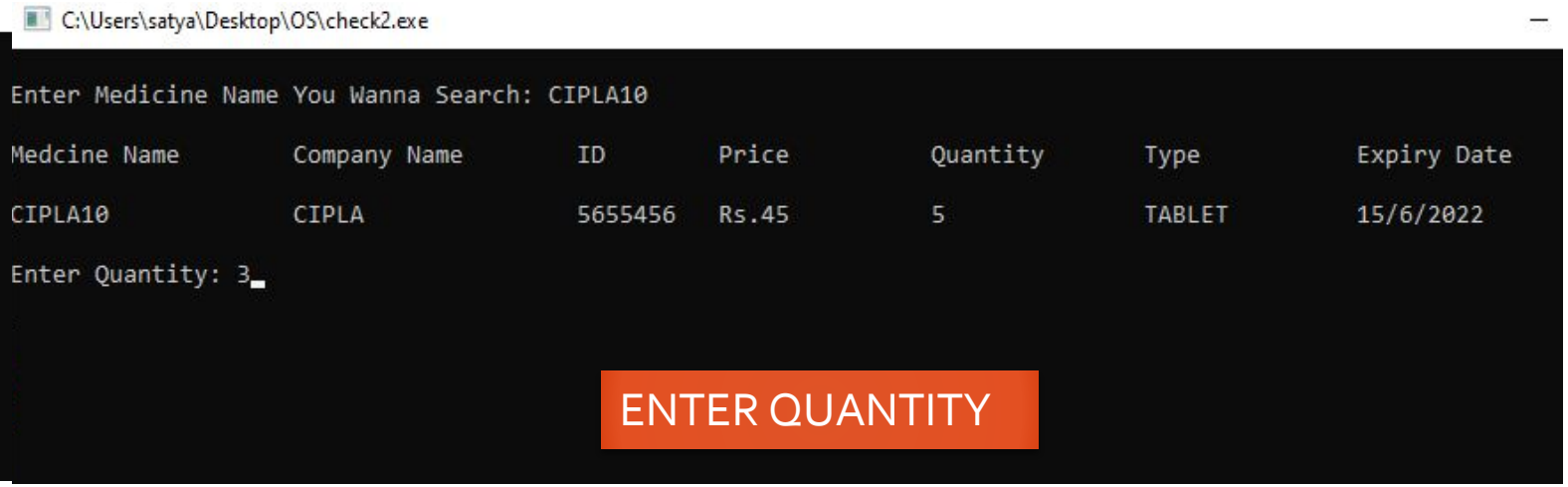




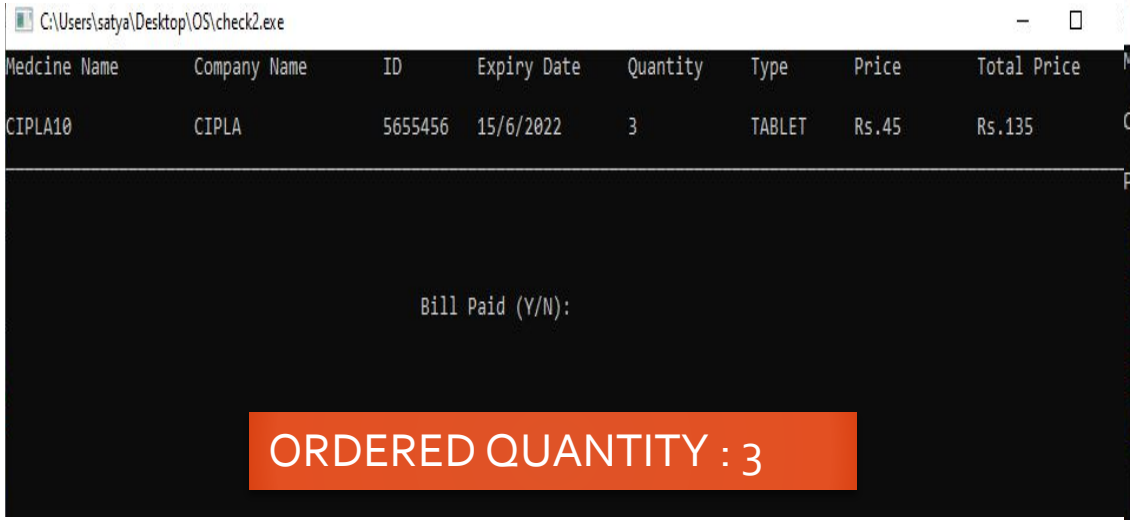
•ORDERING PRODUCT



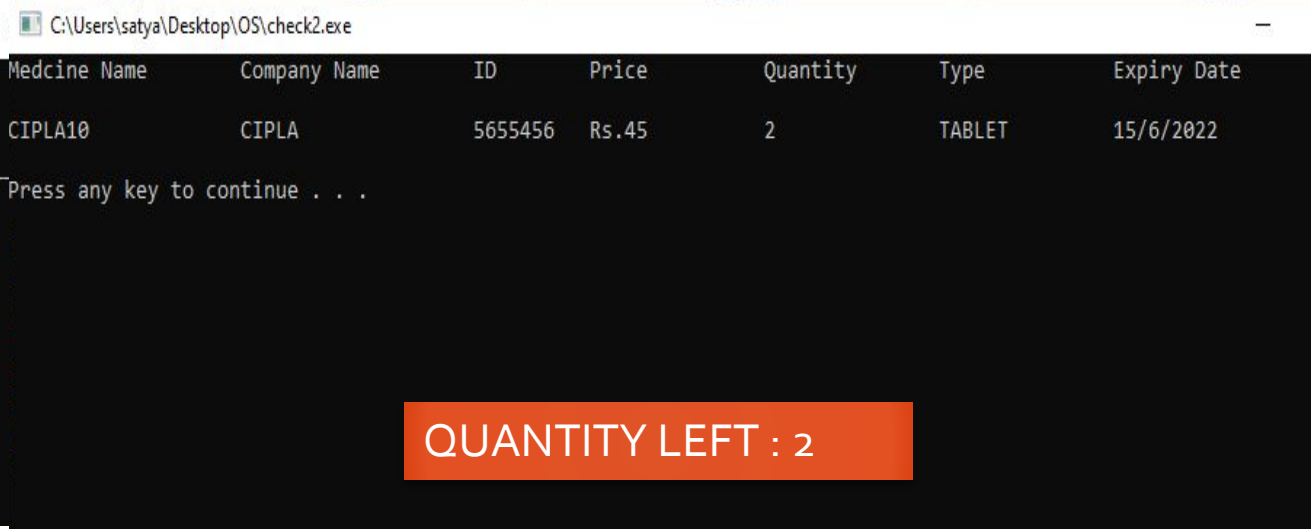
ADD ORDER



ENTER QUANTITY



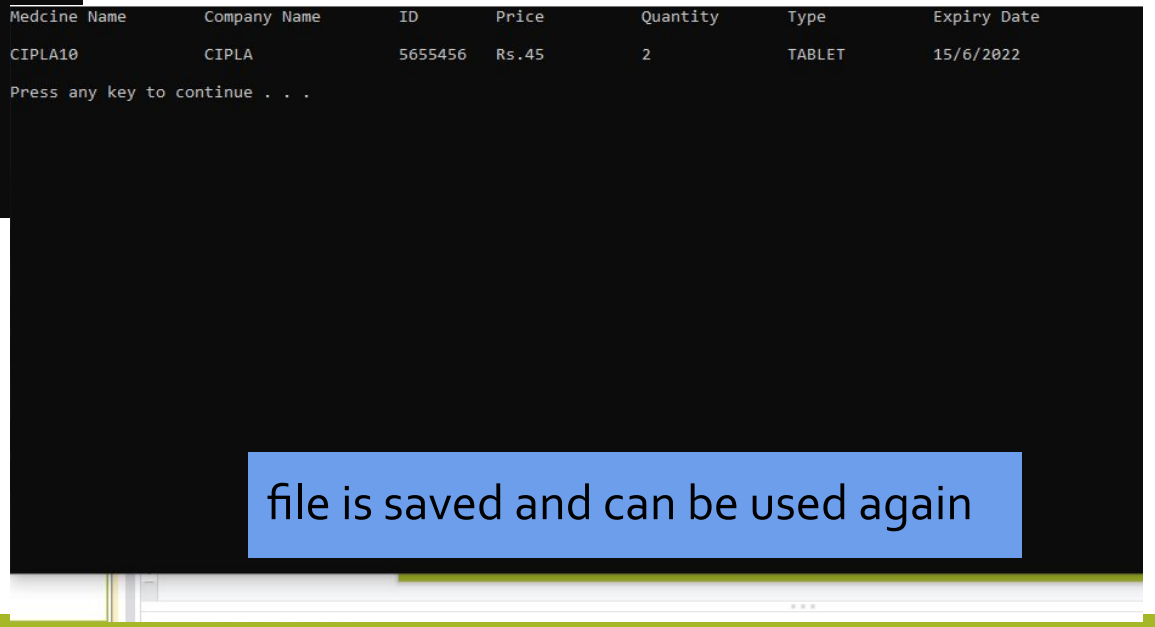
ORDERED QUANTITY : 3



QUANTITY LEFT : 2

SAVING FILE

- I also provided option to save the file , which will help to manage records which will help pharmacy a lot .



THANK YOU !!