**C PROGRAM**

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USAGE

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A file stock.csv must be present always. It is read at startup to create the shop.

It has 2 modes, input customer file (to open 3 CSV files with customer's orders) and life mode.

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CUSTOMER FILE MODE

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> shop.exe -f customer.csv

Loads up customer order that is successfully executed, shop cash updated accordingly.

shop.exe -f Wants\_too\_much.csv

Loads up customer order, the order cannot be executed, error message comes up.

Shop.exe -f OutOfBudget.csv

Loads up customer order, the order cannot be executed, error message comes up.

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LIFE MODE

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> shop.exe

It loads stock.csv file, prints its content on screen and displays the following menu:

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Select your choice:

[1]-Enter new order

[2]-Show shop stock

[3]-Exit application

Option selected:

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We can here select to enter a new order, show shop stock or finish.

If we select [1], the following menu is displayed:

Select your choice:

[1]-Enter customer name [current: ]

[2]-Enter budget [current: 0.00]

[3]-Enter product name [current: ]

[4]-Enter quantity [current: 0]

[5]-Show current order info

[6]-Order products

[7]-Clean shopping list

[p]-Previous menu

Option selected:

Here we must enter the name [1], budget [2], next product to add to cart [3] and quantity [4], we can also show our current shopping list [5] or clean it [6]

Once we are ready we can do the purchase [7]

We can also return to previous menu [p]

IMPORTANT: The name, budget, product name and quantity must be entered in order (codes force this order)

We can edit name and budget at any time

If there is any error, we can clean shopping list and start again

Shop content is updated accordingly when the purchase is valid and accepted.

Difference between Procedural Programming and Object Oriented Programming:

| **Procedural Oriented Programming** | **Object Oriented Programming** |
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| In procedural programming, program is divided into small parts called functions. | In object oriented programming, program is divided into small parts called objects. |
| Procedural programming follows top down approach. | Object oriented programming follows bottom up approach. |
| There is no access specifier in procedural programming. | Object oriented programming have access specifiers like private, public, protected etc. |
| Adding new data and function is not easy. | Adding new data and function is easy. |
| Procedural programming does not have any proper way for hiding data so it is less secure. | Object oriented programming provides data hiding so it is more secure. |
| In procedural programming, overloading is not possible. | Overloading is possible in object oriented programming. |
| In procedural programming, function is more important than data. | In object oriented programming, data is more important than function. |
| Procedural programming is based on unreal world. | Object oriented programming is based on real world. |

[**Procedural Programming**](https://www.geeksforgeeks.org/introduction-of-programming-paradigms/)can be defined as a programming model which is derived from structured programming, based upon the concept of calling procedure. Procedures, also known as routines, subroutines or functions, simply consist of a series of computational steps to be carried out. During a program’s execution, any given procedure might be called at any point, including by other procedures or itself.

Languages used in Procedural Programming:

FORTRAN, ALGOL, COBOL, BASIC, Pascal and C. Python can also support procedural programming.

[**Object oriented programming**](https://www.geeksforgeeks.org/basic-concepts-of-object-oriented-programming-using-c/)can be defined as a programming model which is based upon the concept of objects. Objects contain data in the form of attributes and code in the form of methods. In object oriented programming, computer programs are designed using the concept of objects that interact with real world. Object oriented programming languages are various but the most popular ones are class-based, meaning that objects are instances of classes, which also determine their types.

Languages used in Object Oriented Programming:

Java, C++, C#, Python, PHP, JavaScript, Ruby, Perl, Objective-C.

## Another feature of object-oriented style is presence of Init Constructor.

A constructor is a particular type of method which is used to initialize the instance members of the class.

Constructors can be of two types−parametrized and non-parametrized.

In python, “\_\_init\_\_” is a unique method associated with every python class.

Python calls it automatically for every object created from the class. Its purpose is to initialize the class attributes with user-supplied values.

I have 2 files – oop2.py file imports the information from oop.py file.