

BiL 102 – Computer Programming

HW 04

Last Submission Date: March 19, 2014 – 09:00

Write an automation program for a market warehouse. The program will process “products.txt”. It will contain records of existing **products**.

Contents of the file will be:

“**products.txt**” => code (a number) , type (a character), buying price (a number) , sale price (a number) , current quantity (a number)

Types will be:

f = food stuff

c = cleaning product

p = personal care product

o = other

Your program will be consisting of the following parts:

- a. **Enter products:** Writes products to “products.txt” with required information.
- b. **Report:** (to the console)
 - i. **According to Code and Type:** Searches the product records with the given code and type from the “products.txt” file and reports the current information of this product.
 - ii. **According to a Type:** Searches the product records with the given type from the “products.txt” file and reports the current information of this type.
 - iii. **According to Quantity:** Searches and lists the product reports which are **lower** or **higher** than the given quantity. (**It will ask to the user.**)
 - iv. **List all products with their information**
- The program will ask the user whether to use the existing products file or create a new one.
 - If the user chooses to create a new file, the program will get products with their information until the user chooses to stop.
 - If the user chooses to use the existing products file. The following menu will be displayed. (The program will end when the user chooses to exit).
 - [2] List all records
 - [3] Search by type
 - [4] Search by type and code

- [5] Filter by quantity
- [6] Exit
- Check inputs and ask again until the user enters a correct input. (sale price must be higher than buying price, code must be a number and type must be a character ...)
- Good user interface designs will be rewarded with extra points.

General:

1. Obey honor code principles.
2. **Read your homework carefully** and follow the directives about the I/O format (data file names, file formats, etc.) and submission format **strictly**. Violating any of these directives will be penalized.
3. Obey coding convention.
4. Do not forget to put the required **tags** in the main function.
5. Your submission should include the following files **and NOTHING MORE** (no data files, object files, etc):
 - HW01_<student_name>_<studentSurname>_<student number>_part1.c
 - HW01_<student_name>_<studentSurname>_<student number>_part2.c
 - HW01_<student_name>_<studentSurname>_<student number>_part3.c

Put all of these files in a folder named as below, compress and upload the folder.

HW01_<student_name>_<studentSurname>_<student number>
6. Do not use non-English characters in any part of your homework (in body, **file name**, etc.).
7. Deliver the printout of your work **until the last submission date**.