

PF LAB # 11

TOPIC POINTERS / DYNAMIC MEMORY/FILE HANDLING /FUNCTIONS

1.Make use of appropriate parameters and return types.

2.You can't use fixed sized array, only dynamic arrays are allowed according to the data stored in file

Question 1:

The Al-Minhas Medical store needs an “expert” computer programmer to help keep track of their inventory. The store maintains all their vitamin stock information on disk in a file. The data is organized as follows:

The first line of the file contains the headings labeled as Name Price and Quantity

The first column contains the vitamin names (A, K, D and so on)

The second column contains the unit price of a single jar of that particular vitamin.

The third column has the number of jars of that vitamin in the store.

Sample Input File:

Name	Price	Quantity
A	12.95	23
K	9.99	56
D	6.99	25
and so on...		

(NOTE: There can be maximum of 13 Vitamins in A file but it can be less than that, so we have no idea how many vitamins are in it.)

Write a C++ program that will do the following using functions:

Design a menu-based program by providing 7 menu choices to user from where user can select the one as well.

1. A function that will create an input file by reading data from user for n different vitamins, where n is input by user should be greater than 0 and less than 14, which includes their Names (single letter) , unit price, and the number of jars for each vitamin has in the store and write that data into an input file as above.(Note: possible only with the dynamic array)
2. A function that will search a Vitamin by its Name from file and display its price and the quantity in stock.

3. A function that will calculate and return the total value of the store's inventory of the search vitamin product by using the following formula (Total Inventory=unit_price * number_of_jars).
4. A function that will edit the requested vitamin (price or quantity or both(ask from user what to modify)) and update the file.
5. A function that prints the complete details of all the vitamins as output on screen as follows:

Vitamin	Price	Quantity	Total Inventory

A	12.95	23	297.85
K	9.99	56	559.44
D	6.99	25	174.75

The average price for a vitamin is: 9.98
The total store inventory is 104 jars of vitamins