

## VII. TABLES AND TEXT FILES

### Objectives :

The goal of this practical work is to understand the relation between charging data into tables. Example charging text files into memory.

### A. Charging Data base in the memory

In a company X, the data base of prices/products and stocks is done by an old man, and available under text format (that for each product the price of unit and the quantity available). The first line of the file indicate the number of products of the data base. Line i indicate the product code.

```
N
price1 quantity1
price2 quantity2
...
priceN quantityN
```

#### Exercise 7.1

Write a function that save the data base in the memory. Each product is represented by a structure contain the price the quantity and the package of data will be saved in the memory by a table of structure.

#### Exercise 7.2

Write a function that show (print) the data from the memory and test it.

#### Exercise 7.3

Write a function that know the price of a product when you give it's code.

To test everything create a data base and test all this functions.

### B. Treatment of command - by client

Clients fill the command list. Each command has the format of a list of lines (also old man doing the command), each line has the code of products and the quantity :

```
code1 quantity1
code2 quantity2
...
codem quantitm
```

#### Exercise 7.4

Write a function that give back the price of the command entered as a text file `command.txt`. We don't need to charge this command in the memory.

#### Exercise 7.5

Change the function in a way that affect the stock data in the memory. And return (-1) as price in case there is not enough stock for the command.

#### Exercise 7.6

Realize an update on the file of prices and stocks using the save at the end of execution of the program.