Distributor instructions

August 2022

We want to define a new data structure to represent a can drink distributor and to simulate it's functions. We suppose that drink type is defined by a name, a code, and a price which are respectively a string and two floats.

1 Specifications

- A distributor has the form of a grid with L lines and C columns. There is LxC squares. (1 square = 1 space for a product)
- Every squares have an unique number between 1 and LxC which is assigned at the creation.
- All the drink in a square have the same name. They represents the same product. We don't mixing different beverages in a square.
- In a square, can are arranged in a specific order (to define), can in the first position is the older, so the next to leave the distributor.

In an distributor we can do make two mains operations: to fill the distributor with beverages and buy a can by giving money corresponding to the price and by giving the id (the number which represents it).

2 Data structures used

I choose the following structures:

- Distributor is a tab of pointers which are pointed to squares
- Squares are represented by a drink and a queue of can
- Drink is represented by a name, a number and a price
- Can have just an attribute vol for the volume

For access to the code: https://github.com/elizabethgandi/Distributor.git

¡Feliz lectura y buena suerte!