PortContainer class with private attributes

* Eticheta(label) (character string);
* tipContainer (4 elements array , enum type, with values Mic\_10mc, Mediu\_25mc,Mare\_50mc, Jumbo\_100mc));
* nrContainere (int[4] – array that store the number of containers for every type).

The class should implement Cloneable and Numarabil interfaces to allow deep-copy between objects.

In interface Numarabil, method int getCapacitate() will be implemented, using tipContainer and nrContainere.

Macara(crane) class with private attributes:

* tipContainer (4 elements array , enum type, with values (Mic\_10mc, Mediu\_25mc, Mare\_50mc, Jumbo\_100mc);
* timpManipulare (milisec, int)

Interface Descarcare should be defined and contains method int DescarcaContainer(PortContainer, Macara).The method will return the number of containers left to unload from PortContainer, from tipContainer handled by the Macara instance received as the input parameter in the method

Build a container fleet as a collection of objects and populate this collection with at least 3 instances of PortContainer.

Implement saving the PortContainer collection to a text file: PortContainer .csv. Each line of the file will contain the attributes of a PortContainer , separated by a comma character. Implement reading the previously created text file and restoring the PortContainer collection to memory using another type of collection.

Based on the Descarcare interface, download a PortContainer by means of robotic cranes. Each crane is capable of handling a certain type of container. Robotic cranes are controlled in distinct threads. At one point only one crane can lift a container of a certain type off the ship, the other cranes having to wait. Implement concurent work load so that all containers are unloaded from the PortContainer ship.