

Laboratory Assignment

Subtask 1



LABORATORY GROUP: A1 – 07

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GITHUB REPOSITORY: A1-07

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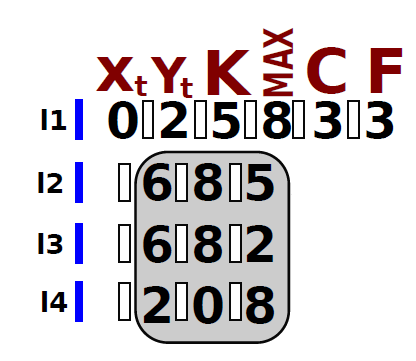
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### A BRIEF RESUME OF THE PROBLEM

The main goal of this laboratory assignment consists of defining, designing and developing an agent program to find the sequence of actions to be taken by a tractor to ensure that all the sand in a field is evenly distributed on the ground. So, all the boxes will have an equal amount of sand K.

The first things to be done are:

* Implement an internal representation of the field.
* Create a field.
* Reading and writing a field from/to a file.
* Generate all possible actions from a field with the tractor in the (Xy, Yt) box.
* Get a new field after applying an action to a given one.

It is necessary to take into account the format of the file where the provided information is going to be:

### OUR IMPLEMENTATION OF THE PROBLEM

### The programming language that we are going to use is Java. We have decided to use it because it is the programming language that we know best, also Java is a very complete language so we will have available all the data structures we are going to need.

### The field is going to be represented as a bidimensional array which boundaries are defined through the file.