Simple Spreadsheet Engine (SSE)

You are faced with the task of quickly implementing a very simple spreadsheet engine (i.e. a much simplified version of Microsoft Excel).

A spreadsheet is a grid of cells. For simplicity, the coordinates are integer numbers.

We will need only two types of cells:

- “absolute value cell”: the cell contains an integer number;
- “formula cell”: the cell contains a formula that combines two “absolute value cells” using a binary operator. We can have the following operators: +, -, * and /.

Your job is to design the above simple spreadsheet engine, along with a test method, as described below.

The test method should initialize the spreadsheet with cells of both types (at least 8 absolute value cells and four formula cells, each pointing to two of the absolute value cells). After initializing the cells as described above, the updated contents of the spreadsheet should be displayed, whereby formula cells should display their computed values, based on the binary operator and the contents of the associated absolute value cells, and not the stored formula!

Provide at least a UML class diagram (must not be in electronic form).