ASSIGNMENT FOR "SOFTWARE DEVELOPMENT ENGINEER" POSITION

Implement a simple excel application.

Input: a file `testcases.txt` with the following structure:
- The first line will contain a number N indicating the number of cells
- The rest 2*N lines will have the following structure:
  - The first line contains the cell name (e.g A1)
  - The second line contains the cell content

The content of each cell can be a number (double), or a mathematic formula (consists of +- */) and the formula can also refers to other cells.

Output: the final values of each cells, sorted alphabetically by the cell names

Example:

Input:	Output:
3	A1
A1	5
5	A2
A2	31
A1 * 5 + B1	B1
B1	6
6	

Notes:
- The application must strictly read from the specified file
- The application must report for any circular dependencies

Example:

Input:	Output:
2	Circular dependency between A1 and A2 detected
A1	
A2 * 2	
A2	
A1 + 5	

Follow up question:

- Re-calculate the cells when the value of one cell changes