12 Basic Tutorial

Prerequisites

- ghc Haskell compiler;
- graphviz;
- spreadsheet processor with the possibility to export data as .csv file.

Installation

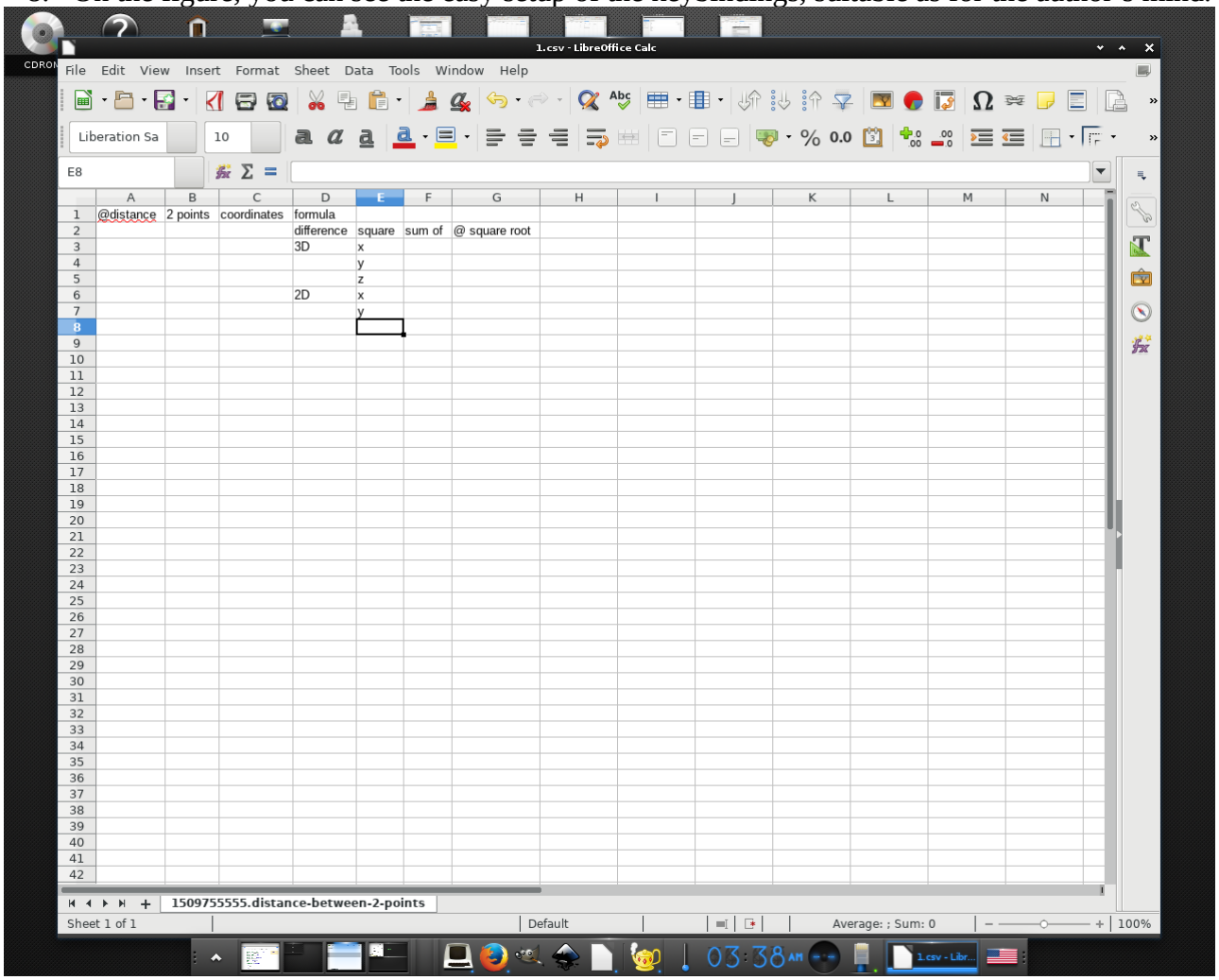
Simply copy the files into the working directory and then run there

```
ghc -O2 -dynamic 12.hs
```

Check whether the 12.sh and 12 files have executing permissions and you can read, white and search the files in the directory and read and execute the 12.sh and 12 files.

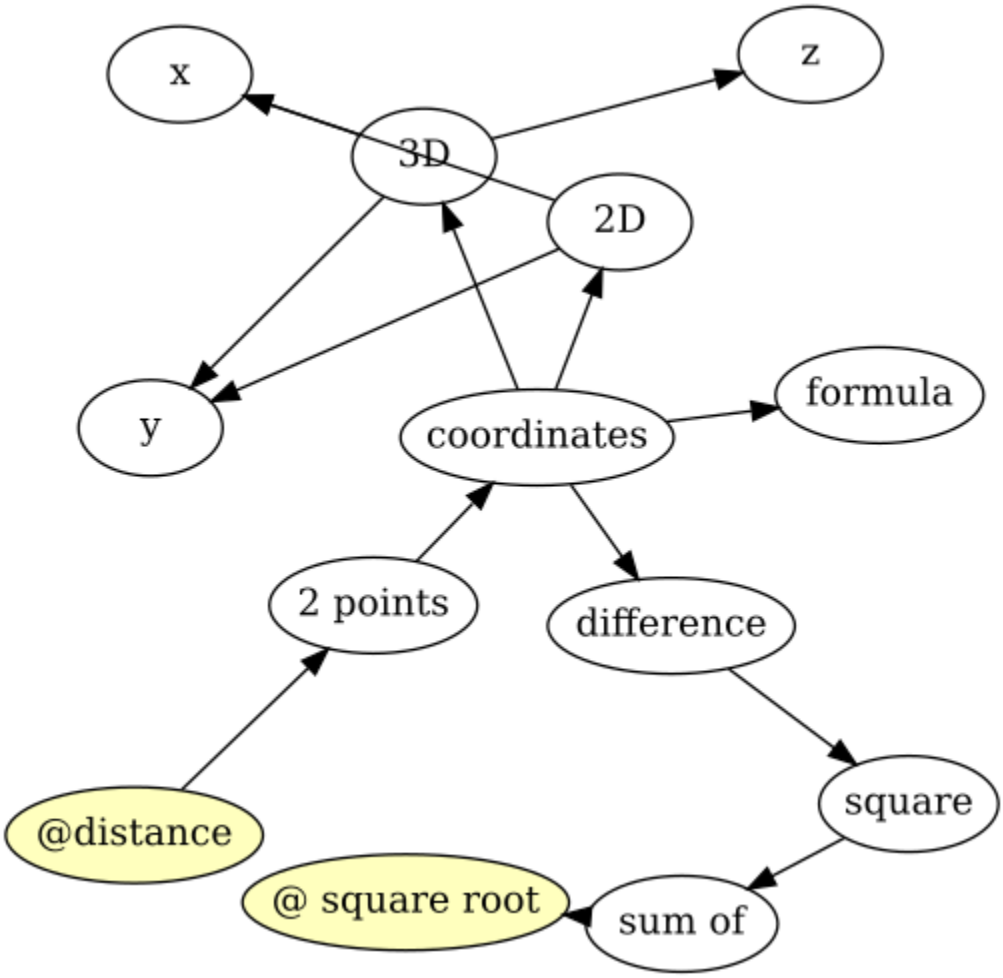
Usage

1. Open an office spreadsheet program, e. g. LibreOffice Calc.
2. Begin to enter the text in the cells.
3. Do not use commas, instead when needed switch to the nearest right-side cell.
4. To make a text visually highlighted, add at the beginning of the cell an ’@’ sign.
5. Lines creates different chains in the graph. Switch to the next cell in a row to produce an arrow to the text in the cell.
6. To make several arrows from the cell, enter a new text in the located below the cell to the next right-sided another cell #2.
7. Usually, you can search the needed text with `Ctrl+F`.
8. On the figure, you can see the easy setup of the keybindings, suitable as for the author’s mind.



9. Above each line, except the first one, there must be at least one filled cell. It must be located just above the text on the new line. Otherwise, the program will produce no reasonably useful output.
10. After entering all the text, save a sheet as a 1.csv file in the working directory. Otherwise, the program won’t work.
11. Run a 12.sh script in a terminal. Enter a word name of the file to be saved. DO use alphanumeric symbols and dashes if needed. Press `Enter` and then `Ctrl+D`.

12. Your first visualization is then automatically created.



13. Create a new sheet in the spreadsheet document and switch to it. Repeat all the steps to produce the needed amount of visualizations.
14. Save the spreadsheet document as a spreadsheet file.
15. Press `Ctrl+C` in the working terminal to terminate the 12.sh.
16. Afterwards, you have a sorted by the creation time list of svg files, an x.mmmmm file with the last date time in seconds after beginning of the Unix's era, x12.gv file as a last source file for Graphviz, and a list of csv files, and a saved spreadsheet file. Together they all forms something like a little database.

    Then you can use the produced visualizations for some other documents.