

Latex exercises 4

Today we will practise to use `xfig` tool for drawing figures. Xfig is available in cs and Linux. It is very easy to learn by trying, but you can find more information by command `man xfig` or you can search manual pages in the net (keywords: xfig manual).

Advices:

- You can start xfig from shell by command `xfig` (when the file doesn't have any name) or you can already give it a name by command `xfig example.fig`. If you didn't give any file name in the beginning, you have to save your figure by command `save as`.
- Click `grid mode` and select a grid. Now it is easier to draw objects into positions you want.
- When you are finishing, remember to save your file. (You can save it during drawing, too. If something goes wrong, you can continue from the last saved version.)
- In `edit` menu there is command `undo` which lets you cancel the last drawing operation.
- By default, you cannot draw or move objects anywhere, but only in the grid. If this is too restricting, you can select `Point position` → `Any`.
- When you finish, save the figure as postscript by selecting command `Export` from `file` menu. The default is encapsulated postscript and the file name will be `example.eps` (if your original file was `example.fig`).

Tasks

1. Draw some of the given figures by xfig, save them as eps. Check the eps figures by command `ghostview example.eps` or `gv example.eps`. Notice: your figures do not have to be identical than the examples!

2. Load figure `articletree.fig` from <http://www.cs.joensuu.fi/pages/whamalai/sciwri/articletree.fig>. Open it in `xfig` and make your own changes. Save the file and import it as an `eps` file.
3. Draw figures you need for your own Sciwri paper!
4. Extra task (if you have time): test how to include latex math commands into a figure in `xfig`. Write the math commands (inside `$` characters) into your figure. Select `Edit` command and click the string which contains latex symbols. Change the `Special Flag` to `Special`. When you export the figure select language `Combined PS/Latex (both parts)`. This produces two files `example.pstex` and `example.pstex_t` into your working directory. Include the latter into your document by `\input{example.pstex_t}` as demonstrated in

Extra task: spell checking

Test `aspell` tool for spell checking. Notice that `aspell` is a newer (and better) tool than `ispell`. In our systems, the default language seems to be American English, but you can change it to British English.

- If you run `aspell` from `emacs`, select the dictionary from `tools` → `spell checking` → `select British dict`. Start checking by selecting `Spell-Check Buffer` from the same menu. You get the list of commands by `ctrl-h`.
- If you run `ispell` from command line, give option `-d british.multi`.

Test `aspell` with file `its.tex` <http://www.cs.joensuu.fi/pages/whamalai/sciwri/its.tex> and correct it according to British English!

The `aspell` manual pages: <http://aspell.sourceforge.net/man-html/index.html>

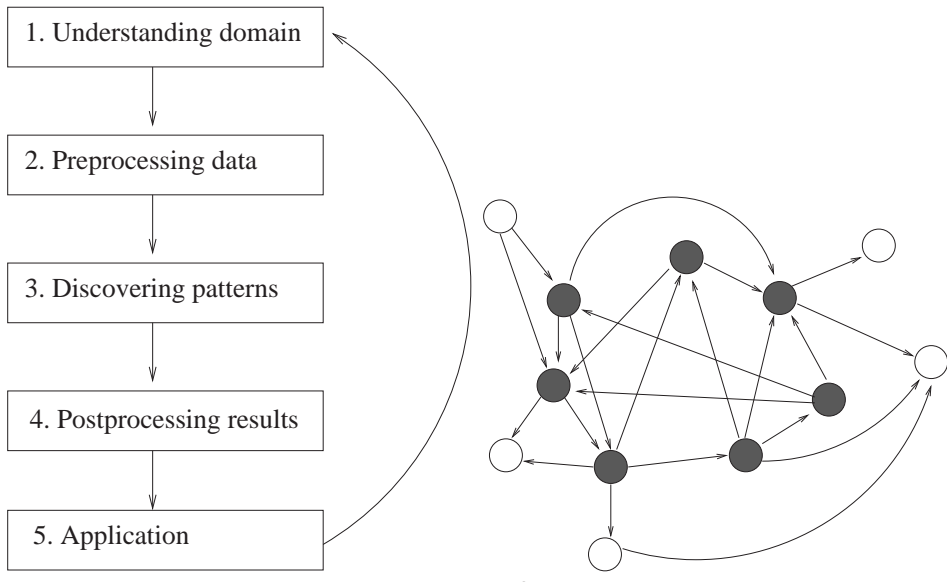
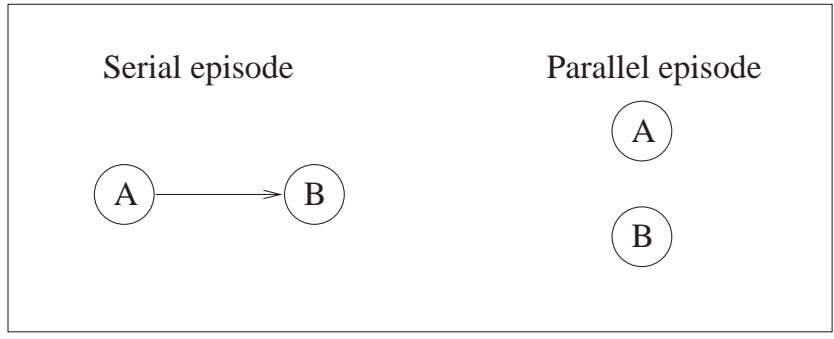
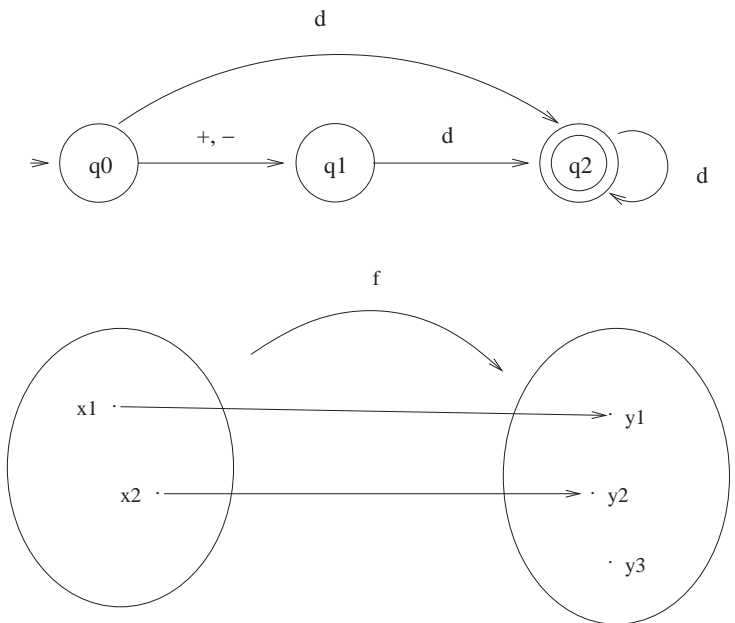


Figure 1: Example figures