

LUT course
Dynamic Online and Beamer Presentations in PDF
using **L^AT_EX** and **T_EXPower**

Exercise sheet 2

Exercise 4

Write down a mathematical proof of several steps which can be presented (preferably as a series of aligned equations) on one slide.

- a) Use `\stepwise` and `\step` to present it step by step.
- b) Do the same with `\dstep`.
- c) Try to highlight some interesting parts of the step which is just being focused on.

Exercise 5

Create a new environment `stepitemize` which will automatically ‘step through’ its items.

- a) Make it display its items ‘step by step’.
- b) Make it use `\dstep` for the same purpose.
- c) Instead of hiding anything, make it use a special item symbol for the step currently active.
- d) Underlay the currently active step with a coloured box.

Exercise 6

The following `pstricks` code will display a diagram of the function

$$\sin\left(x^{1+\frac{d}{100}}\right).$$

```
1 \begin{center}
2   \psset{xunit=.5pt}
3   \newcounter{d}
4   \setcounter{d}{0}
5   \begin{pspicture}(0,-1)(360,1)
6     \psplot[linewidth=1pt,plotpoints=1000]{0}{360}{x \thed\space
7       100 div 1 add exp sin}
8   \end{pspicture}
9 \end{center}
```

Make a presentation which will first show the diagram for the value $d = 0$, then after pressing a key cycle automatically through the values $1, \dots, 100$ and stop at the value $d = 100$, then after pressing a key cycle back to $d = 0$.