

Report on L^AT_EX installation and first document compilation

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Goal

The goal of this work is to install the TeX Live distribution on Windows 11 using the Chocolatey package manager and to verify that the system works correctly by compiling a simple L^AT_EX document from the command line.

Software

- Operating system: Windows 11.
- Package manager: Chocolatey.
- L^AT_EX distribution: TeX Live 2025 (<https://www.tug.org/texlive/>).
- Text editor: Visual Studio Code.

Procedure

1. PowerShell was started with administrator privileges.
2. TeX Live was installed via Chocolatey using the command `choco install texlive`.
3. After the installation finished, the availability of the compiler was checked with `pdflatex -version`. The output reports TeX Live 2025, which confirms a successful installation.
4. A file `main.tex` with minimal L^AT_EX structure (`\documentclass`, `\begin{document}` and `\end{document}`) was created in the directory `C:\Users\kotof\Study\SciWriting`.
5. Compilation of the document was started from the integrated VS Code terminal using the command `pdflatex main.tex`.
6. According to the compiler output, the file `main.pdf` was generated without errors (see Fig. ??).

During the first attempt to compile an almost empty file `test.tex`, L^AT_EX switched to interactive mode and complained about an incomplete document structure. After adding the standard document skeleton, the compilation process finished successfully.

Results

As a result of the work:

- The current TeX Live 2025 distribution is installed on the machine.
- The `pdflatex` compiler is available from PowerShell and the VS Code terminal.
- A test document `main.tex` was successfully compiled into `main.pdf`.

Conclusion

The objective of the task has been achieved: L^AT_EX is correctly installed and ready to be used for further assignments in scientific writing and typesetting. A first working example of document compilation from the command line has been obtained, which allows focusing on the content (formulas, figures, bibliography) in the next tasks.

```
PS C:\WINDOWS\system32> pdflatex --version
pdfTeX 3.141592653-2.6-1.40.28 (TeX Live 2025)
kpathsea version 6.4.1
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There is NO warranty. Redistribution of this software is
covered by the terms of both the pdfTeX copyright and
the Lesser GNU General Public License.
For more information about these matters, see the file
named COPYING and the pdfTeX source.
Primary author of pdfTeX: Han The Thanh (pdfTeX) et al.
Compiled with libpng 1.6.46; using libpng 1.6.46
Compiled with zlib 1.3.1; using zlib 1.3.1
Compiled with xpdf version 4.04
PS C:\WINDOWS\system32> cd C:\Users\kotof\Study\SciWriting
PS C:\Users\kotof\Study\SciWriting> pdflatex test.tex
```

Figure 1: Output of the `pdflatex main.tex` command in the terminal.