

DAT565/DIT407 Assignment 1

Emmy Noether
emmy.noether@chalmers.se

Katherine Johnson
katherine.johnson@gu.se

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This is a template for a report for creating assignment reports for the course *Introduction to Data Science & AI*.

Problem 1

Please create sections that match the problems you are solving. If you need figures or tables, do not remember to refer to them like so: we see the results in Figure 1 and Table 1.

If you need to cite external sources, do so by placing the literature information in the file `refs.bib` in BibTeX format and use the `\cite` command, like so: In the first assignment, we use data from SCB [**SCB:2023**].

The most convenient way to edit and compile this file is by using Overleaf. However, if you have a local L^AT_EX installation, you can compile the file by issuing the following commands:

```
$ pdflatex report.tex
$ biber report
$ pdflatex report.tex
$ pdflatex report.tex
```

Finally, to include your source code in a report, you can use the `\appendix` command to create appendices *after* the bibliography. This changes the way sections are numbered (with letters instead of numbers). The code can then be copy-pasted in a `lstlisting` environment. You can see an example in Appendix A.

Table 1: Nordic countries' area and population.

Country	Area (km ²)	Population
Denmark	43,094	5,935,619
Finland	338,145	5,614,571
Iceland	103,125	387,800
Norway	385,207	5,488,984
Sweden	450,295	10,540,886

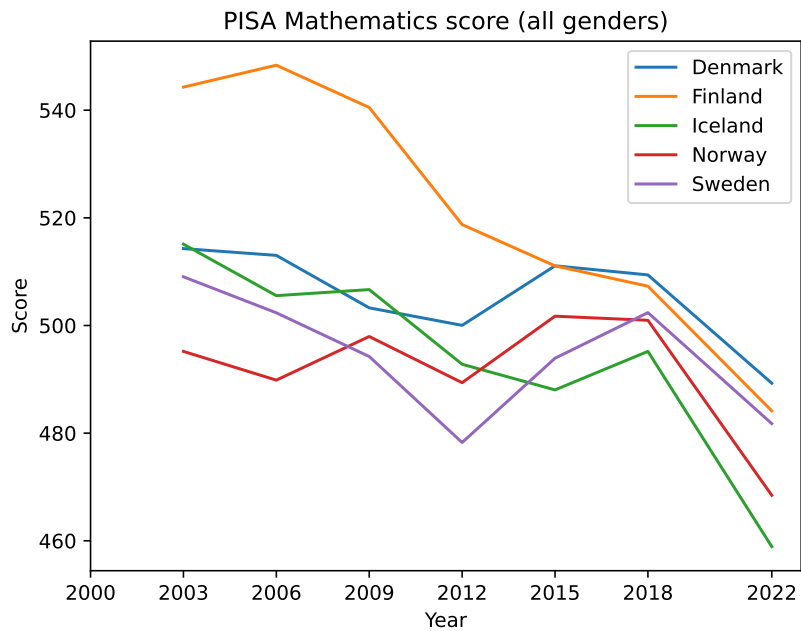


Figure 1: PISA mathematics score in different nordic countries.

A Sample code

Here is a sample code listing. The options make keywords colored.

```
1 import numpy as np
2 A = np.array([18, 249, 55, 150])
3 c = 'error'
4 # this is a comment
```