

Practical 5: CUBLAS and CUFFT libraries

This practical gives an introduction to the CUBLAS and CUFFT libraries using sample code provided by NVIDIA on GitHub.

1. Make both applications, `simpleCUBLAS` and `simpleCUFFT` by typing `make`.
Run them – the output should show that the error between the library result and the corresponding CPU “Gold” code is very small.
You might have to first issue the command

```
export LD_LIBRARY_PATH=/usr/lib64:$LD_LIBRARY_PATH
```

to fix a problem which might affect `simpleCUBLAS`.
2. Read through the source files to see how the library routines are used, referring to the online documentation for both [CUBLAS](#) and [CUFFT](#).
3. If you are interested in either of these libraries, you might like to write your own code to do something of interest to you, or investigate some of the NVIDIA sample codes for other libraries in
`/opt/apps/cuda/11.4/samples/7_CUDAlibraries/`

Otherwise, you might prefer to move on to one of the later practicals, or go back to earlier practicals and do some of the extra bits you may not have had time to do.