Homework 5

In this homework, we would like to compare the time for multiplying two 8000 by 8000 matrices with different BLAS libraries. Please consider at least five of the following BLAS libraries in your report:

- Directly using sources of BLAS/CBLAS
  

- Pre-built optimized BLAS on Intel CPU (Intel MKL for Linux)
  

- Pre-built optimized BLAS on AMD CPU
  

- GotoBLAS
  
  [https://www.tacc.utexas.edu/research-development/tacc-software/gotoblas2](https://www.tacc.utexas.edu/research-development/tacc-software/gotoblas2)

  See the NY Times article
  

  This GotoBlas is not actively maintained now, so it’s unclear if the code can be easily used or not.

- ATLAS BLAS (Its GEMM is used from Kazushige Goto’s)
  

- Open BLAS (An optimized BLAS library based on GotoBLAS2 1.13 BSD version.)
  
  [https://www.openblas.net](https://www.openblas.net)

Write a report about your results, and specify whether you are using multi-thread or not. If you find out other BLAS libraries, you can also compare them in your report.