Assignment 10, due June 7th 2019
Project "The Need for Speed"

Resources:

- `week_10/matrix_mul_bench`
  contains a matrix multiplication benchmark for multiple matrix sizes with score printout

Assignment:

- Maximize the performance of the matrix multiplication and the benchmark score for the hardware in RR 15
  - Document all optimization steps and respective performance improvements/degradations
  - For optimization parameters (e.g. work group sizes), explain how you chose them
  - Any changes to the algorithm are permitted, as long as the given problem is not modified (e.g. changing memory storage is allowed, re-using pre-computed results is not allowed)
  - When working with multiple kernels, the execution times must be summed up. For simplicity, queuing times may be ignored.
- Measure the overall score on the hardware present in RR 15. The general goal and assignment is to beat the performance of the CPU version for all problem sizes.

Hints:

- Friday May 31st can be used for development, measurements, and discussion.
- The optimized code along with the optimization report must be available on June 7th

Solution upload:

- Full source code and optimization report including benchmark scores
- Via e-mail to philipp.gschwandtner@uibk.ac.at – one submission per group only!
  Subject: "[PS703106] [AS10] GR_## - NAME1, NAME2, NAME3"
  Solution must be submitted before Friday June 7th 09:15!