

# 20875 Software Engineering

## Tutorial 5

1. We want to implement a fast matrix multiply code for medium-sized matrices (e.g.  $1024 \times 1024$ ).

Download `matmul_0.c`, and implement the code of the function `matrix_multiply()`.

Then, find performance issues and, if possible, improve the implementation.

2. We read (from standard input) a stream of bytes as unsigned 8-bit integers. We want to filter those integers, and write (to standard output) only some of them. Specifically, we write those who are divisors of 873248763249102240.

Download `filter_0.c`, and implement the code of the function `filter()`.

Then, find performance issues and, if possible, improve the implementation.