Exercise sheet 10

To be handed in on 28.06.2024.

Exercise 1 [*File I/O*]   (6 pts.)

Lasse is angry about parking cars in no-parking zones and wrote down their license plate numbers. Download his file with license plate numbers:

https://itp.uni-frankfurt.de/~eichberg/pprog-sose2024/license_plates.txt

Unfortunately, the letters in this file are all in lower case. Before Lasse can report the car owners to the authorities, all lower case letters have to be capitalized.

Write a C program, which opens the file license_plates.txt in reading-mode, as well as a file license_plates_corrected.txt, in writing-mode. If fopen returns NULL for either file, print a suitable error message to the I/O-stream stderr and exit the program with exit(1). Read each character in license_plates.txt individually and capitalize it, if it is a lower case letter. Then, write the character to the file license_plates_corrected.txt. Close each file, once it is no longer required.

Hint: You can convert a lowercase into to an uppercase letter and vice versa by adding/subtracting the difference 'A'-'a' to the corresponding char variable.

Remark: Checking for NULL pointers, as well as closing files are good practices, which you should always follow.