Today’s Topics

• Section 9
• Strings
Section 9

Who has read it?

Any questions?

What I think is important:

String is just a char[] where the “last” element is '\0':

char[] string = {'C', 'S', '1', '3', '6', '\0'}; // char[] string = "CS136"
char[] notastring = {'C', 'S', '1', '3', '6'};

String vs. String literal: mutable, stored in stack, char[] vs. immutable, stored in RO, char *

Know your <string.h>-functions: do not reinvent the wheel!
Exercise – `strshort`

- Implement the program `strshort.c`. After reading all strings (maximum 10 strings with maximum 20 characters each) from input, the program should print the read input as well as the shortest string read.
  - Check if the program stub / skeleton is working correctly.
  - Add the required functionality.

- **SPOILER:** There are at least two issues with the program stub / skeleton!
Exercise – str10rcopy

• `strcpy` cannot be used when the strings to copy overlap:

• Implement `str10rcopy`. This function has the same functionality as `strcpy` but allows overlap between source and destination strings:

  ```c
  str : ['C', 'S', '1', '3', '6', '\0', '\0', '\0', '\0', '\0']
  str10rcopy(str + 3, str + 0):
  str : ['C', 'S', '1', 'C', 'S', '1', '3', '6', '\0', '\0']
  str10rcopy(str + 3, str + 1):
  str : ['C', 'C', 'S', '1', '3', '6', '\0', '6', '\0', '\0']
  ```