

Exercise Sheet 05 (Dennys Huber)

Exercise 1

- cc does only work with malloc and the .c extension
- CC works with both malloc and new.
- my extension is cpp
- Code can be found [here](#)

Exercise 2

- In C $p[-1]$ is the previous element on which the pointer is pointing and sets it to 42.
- p is the value stored inside the pointer, which is usually an address to another place in memory in our case it points to the first element of our array.
- $*p$ is the value stored at the address the pointer is pointing to. I.e. it's the first value of the array, which is an integer.
- $\&p$ is the address of the pointer itself
- $*(p+1)$ is the second value of the array
- $*p+1$ is the value of the first array element incremented by one
- $q[0] = p-1$
- $*(q+10)$ is the second to last element of p
- $*(q+11)$ is the last element of p
- M is a matrix with 2 rows and 4 columns
- M is an array of integer and size 2
- $*M$ is a pointer onto the matrix
- $**M$ is pointer to the pointer of the Matrix
- $M[1][3]$ is 8
- $*(M[0]+1)$ is 1
- $*(*(M+1)+3) = 8$
- $M[0]$ and $M[1]$ are not stored next to each other.
- The code can be found [here](#)

Exercise 3

- The solution can be found [here](#)