

## Exercise 8

### 1. Create the function `to_upper(s)`

Create the function `to_upper(s)` which takes a `String s` as input and returns a `String` where all ASCII letters (a-z) are transformed to upper case, the other characters stay the same.

2. Create one version which uses `toupper(c)` from `<ctype.h>`.
3. Then extent the program with a function implementing your self `toupper(c)`.

**Hint:** To reimplement `toupper(c)` inspect closely the ASCII table of the lower, and upper case letters. The solution can be realized with simple arithmetic!

### 2. Write a program which writes to `stdout` and `stderr`.

2. Write a tiny program which outputs alternating “hey!” to `stdout` and then “ho!” to `stderr`. In between the two output of the program shall sleep for 1 second.
3. Write a bash command which writes all outputs of the `stdout` to the file `hey.txt` and all the output of the `stderr` to the file `ho.txt`
- 4.

## Project P01: Linked Data In-Memory Store

After the project set-up with some dummy information try to define some data “by hand” and start to work on the `match()` function.

- Define a data structure which you then fill with some example information statically (see the example from the [project description](#)). Make sure to define it outside the `match()` function.
- As a first step see if you can `printf()` all the triples which match the `char* S` variable.