

# TDT4205 - Problem Set 4

---

Nicolai H. Brand

```
L_main:                -- I decided to label the main function
    n = 5
    l = n + 1
    a = 0
    b = 1
    result = 0
    i = 1
L1:
    if i >= l then goto L2
    result = a + b
    a = b
    b = result
    i = i + 1
    goto L1
L2:
    param "The "
    param n
    param "th number in the sequence is: "
    param result
    call print, 4
    return 0
```

Assumptions:

1. For the return, we need to jump back to where we came from. From the PS4\_lecture slides, apparently there is a return construct in TAC.
2. I assume the arguments are properly loaded before use by the called function. The first pushed parameter should become the first argument, the second parameter the second argument, and so on.
3. I use `if expr then goto label` syntax for conditional control flow.