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universitet
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TDT4205
Kompilatorteknikk
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Problem Set 4

- 1 Using `BeginFunc <name> <params...>` to define functions, which are closed by `return [value]` (Value optional).

```
BeginFunc catalan n
    n_1 = 2 MUL n
    n_2 = n ADD 1
    Param n_1
    f_1 = Call factorial
    Param n_2
    f_2 = Call factorial
    Param n
    f_3 = Call factorial
    x_1 = f_2 MUL f_3
    x_2 = f_1 DIV x_1
    Param x_2
    Call print
    Return 0

BeginFunc factorial n
    result = 1
    i = 1

    n_1 = n ADD 1
factorial_WTest:
    IfFalse i < n_1 goto factorial_WEnd
factorial_WBody:
    tmp = result MUL i
    result = tmp
    tmp = i ADD 1
    i = tmp
    Jump factorial_WTest
factorial_WEnd:
    return result
```