## Assignment #2 - Tail recursion Functional Programming

Anders Kalhauge and Jens Egholm Petersen

Spring 2018

## 1 Tail recursive factorial

Write a Tail recursive version of the FACT program to virtual machine. See slides for inspiration. Remember that a tail recursive fundation should only call itself as the very last thing

## 2 Stack optimized factorial

Rewrite the Tail recursive program so that it uses JMP instead of CALL to reduce the size of the call stack. Note that the very first invocation of the function must still be a call.

## Hand in

Can be done in groups up to three.

The solution accompanied with a short description in a README.md file should be uploaded (pushed) to a git repository, and handed in in peergrade.io before February  $21^{\rm st}$  2018