

Programming hand in 11 Alexander Bjerno

<https://github.com/Aarhus-University-ECE/assignment-11-hipdoghotdog>

1)

The base case is  $\text{fact}(1)=1$

And the inductive step is

$\text{Fact}(k)=k*\text{fact}(k-1)$

Assuming that  $\text{fact}(k-1)$  correctly computes the  $k-1$ th factorial

2)

Base case  $\text{sumn}(1)=1 \cdot 1 - 1 = 1$

Inductive step

$\text{Sumn}(k)=2*k - 1 + \text{sumn}(k - 1)$