

TDT4205 – PS4

1 Three-Address Code (TAC)

BeginFunc factorial(n):

 i = 1

 res = 1

 t_0 = n + 1

 goto L2

L1: res = res * i

 i = i + 1

L2: if i < t_0 goto L1

 return res

BeginFunc catalan(n):

 t_0 = n

 t_1 = 2 * t_0

 t_2 = t_0 + 1

 param t_1

 t_3 = call factorial, 1

 param t_2

 t_4 = call factorial, 1

 param t_0

 t_5 = call factorial, 1

 t_6 = t_2 * t_5

 t_7 = t_3 / t_6

 param t_7

 call print, 1

 return 0