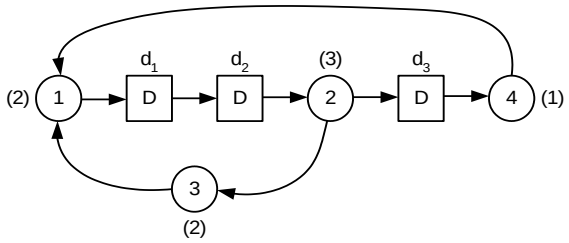
DSP in VLSI Design
Homework (V)

Unfolding

Deadline: Oct. 27

1. In homework (II), you have computed the iteration bound of the following DFG. Please design a new DFG with unfolding to achieve this iteration bound.



2. In homework (III), you have designed a 3-parallel architecture for a direct-form FIR filter, $y(n) = ax(n) + bx(n-2) + cx(n-3)$. Please derive the 3-parallel architecture again by using the unfolding technique.