

# ECE5560 Spring 2025

## HW 2

### Reading:

Section 2.4.2

### Problems:

- 1) For the DFG shown in Fig. 2.12, the computation times of the nodes are shown in parentheses. Compute the iteration bound of this DFG using the LPM algorithm.
- 2) Compute the iteration bound of the DFG in Fig. 2.15 using the LPM algorithm. Assume that addition and multiplication require 1 and 2 u.t., respectively. Label the delays from top to bottom by d1, d2, and d3.
- 3) i) Compute the iteration bound of the DFG in Fig. 2.13 using the LPM algorithm assuming that addition and multiplication require 1 and 2 u.t., respectively.  
  
ii) Can we skip the computation of some matrices without affecting the result of the iteration bound? Compare the matrices you derived with those from i) and compute the iteration bound. (hint: the delay elements in Fig 2.13 are in groups of four)