The Decreasing-Time Algorithm

Lecture 36
Sections 8.4

Robb T. Koether

Hampden-Sydney College

Wed, Apr 18, 2018

1 The Decreasing-Time Algorithm

2 Assignment

Outline

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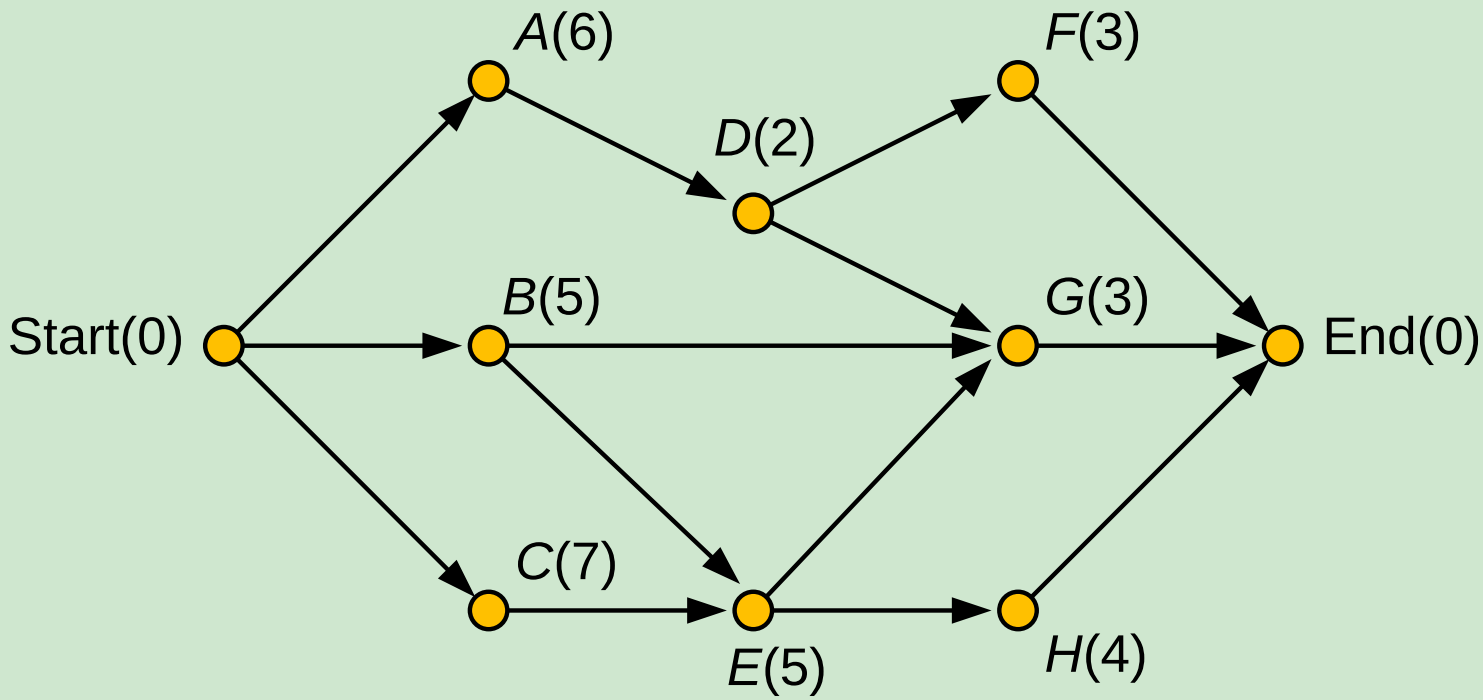
2 Assignment

The Decreasing-Time Algorithm

Definition (The Decreasing-Time Algorithm)

The decreasing-time algorithm creates a priority list in which the tasks arranged in order of decreasing time. It then proceeds as before.

Example (The Decreasing-Time Algorithm)



- Apply the decreasing-time algorithm with 2 processors.

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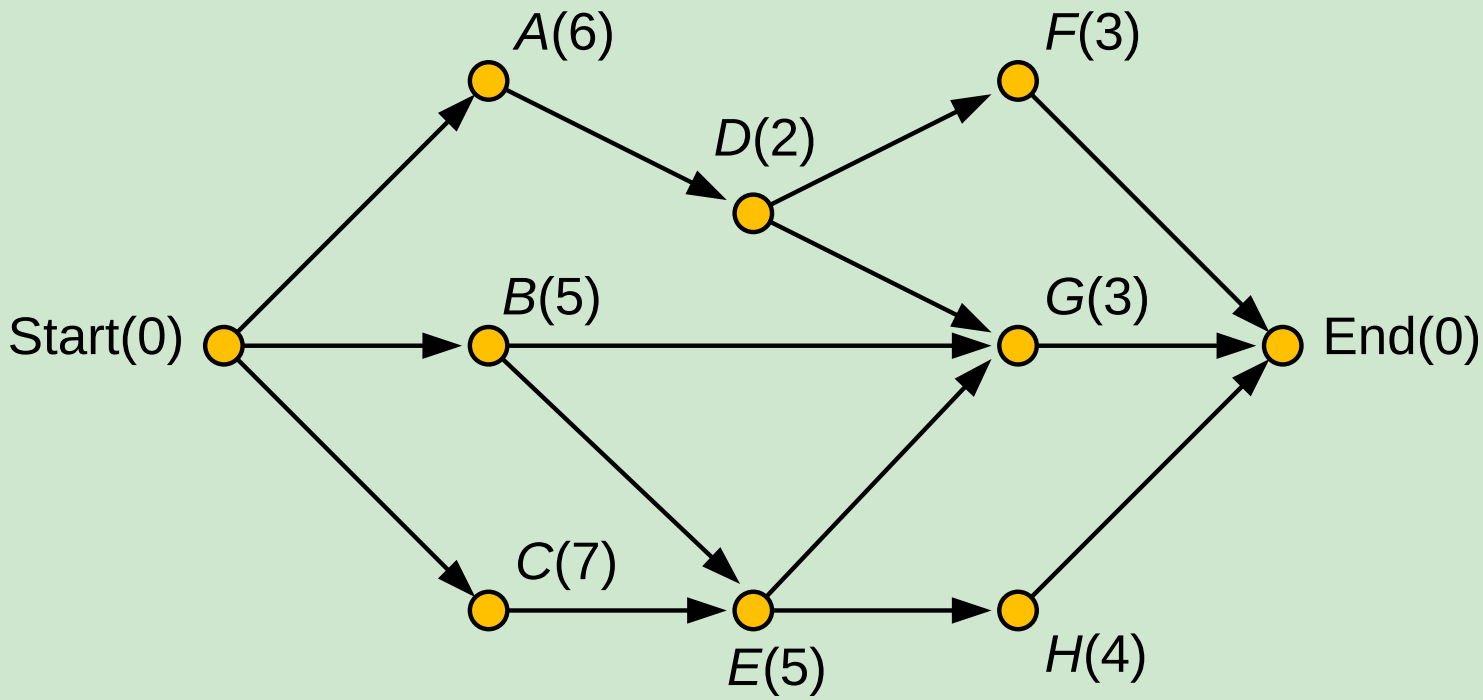

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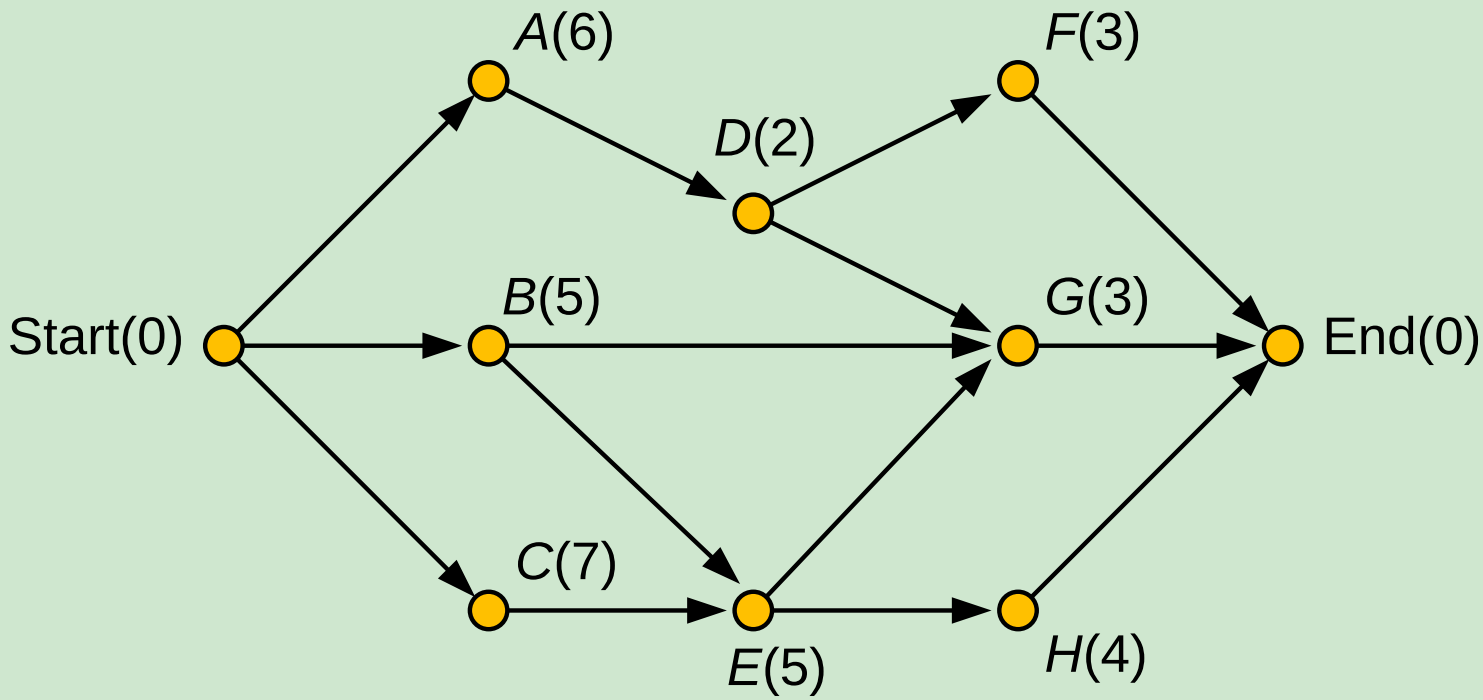

- Apply the decreasing-time algorithm with 2 processors.
- Apply it with 3 processors.
- Would it help to have 4 processors?

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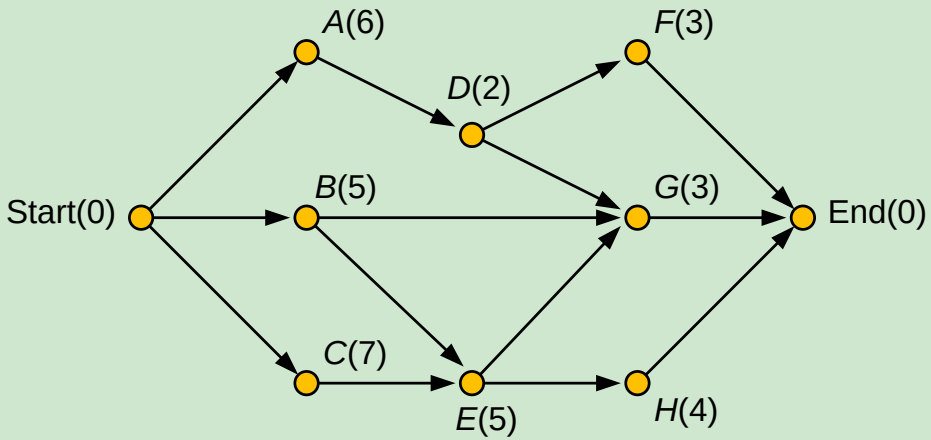
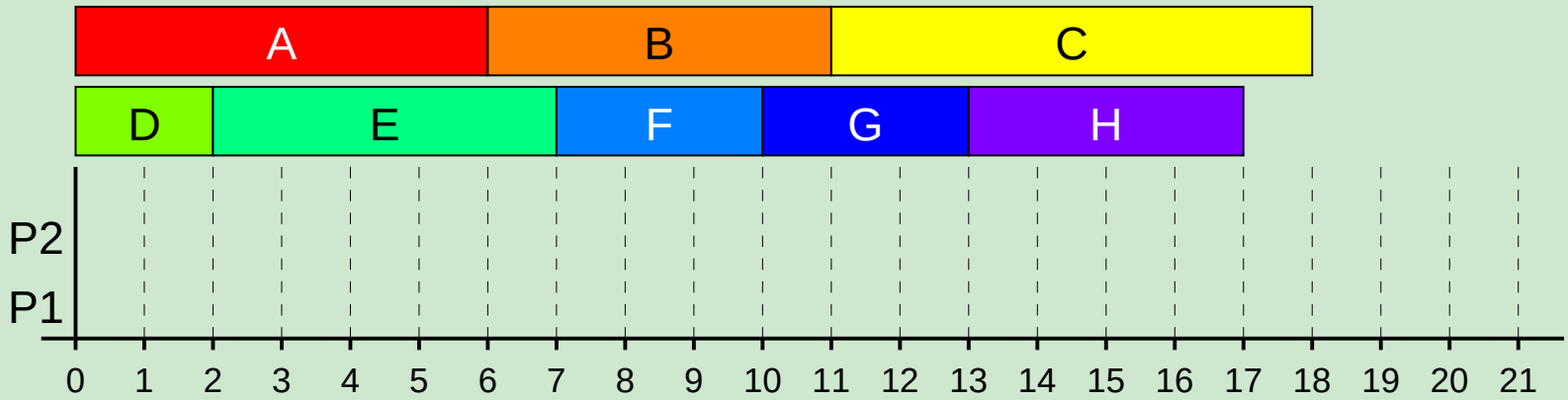
Example (Priority-List Scheduling)





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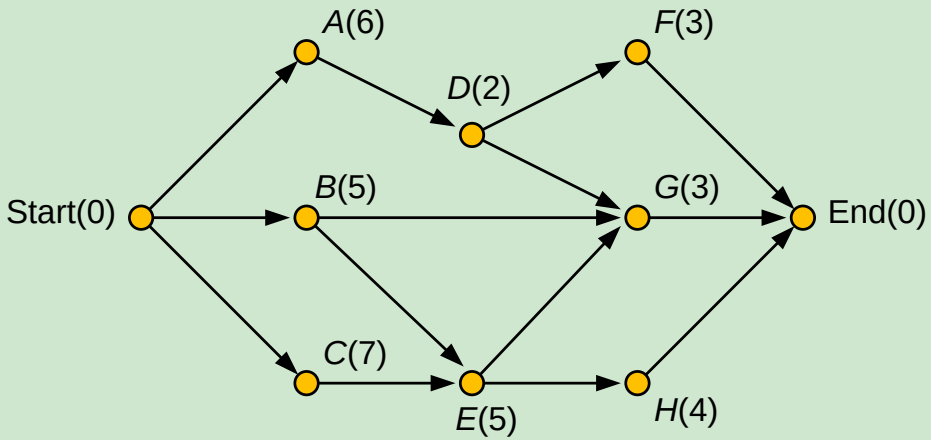

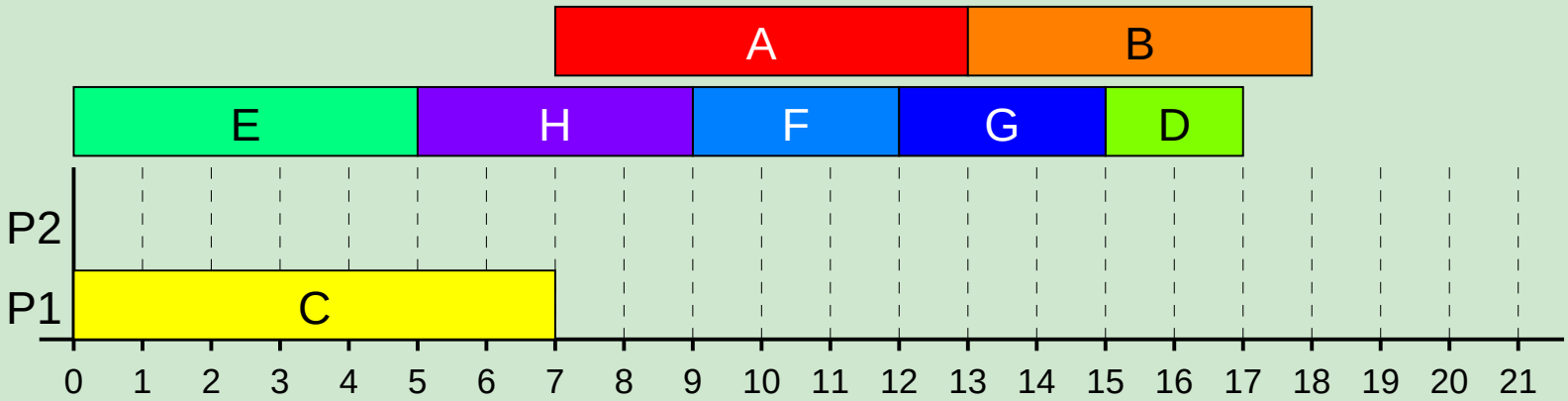

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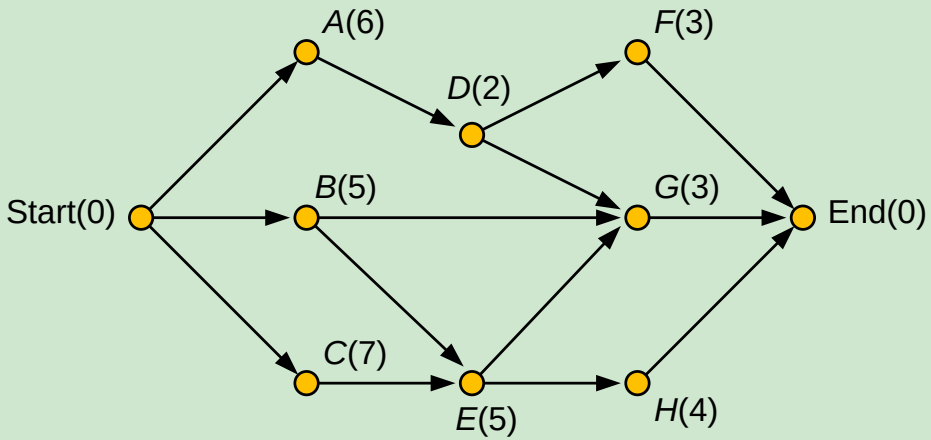

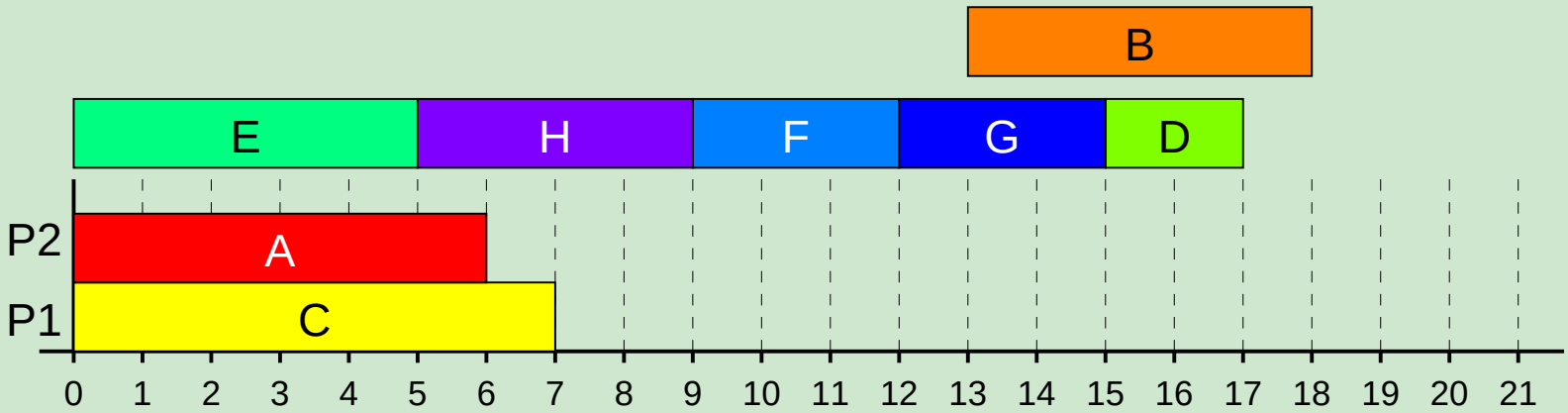

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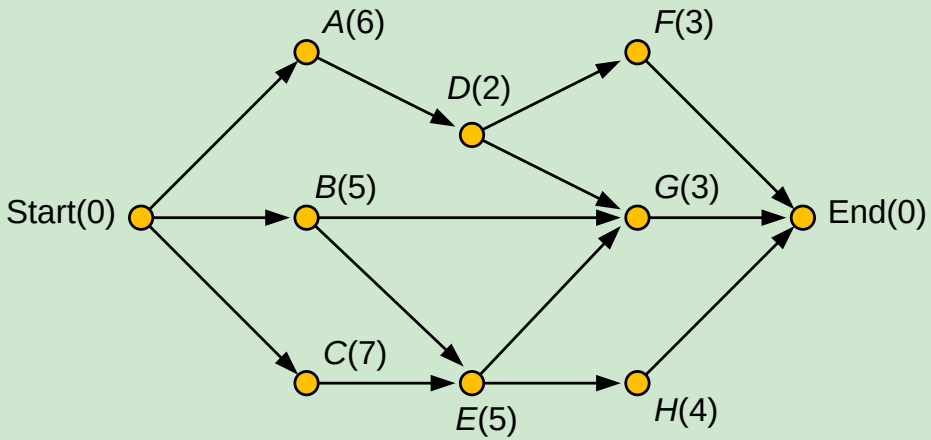

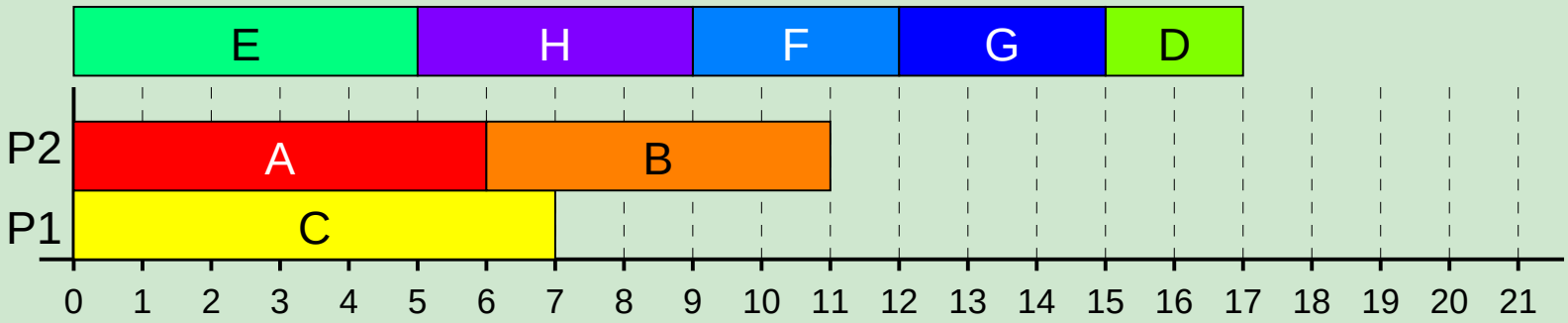

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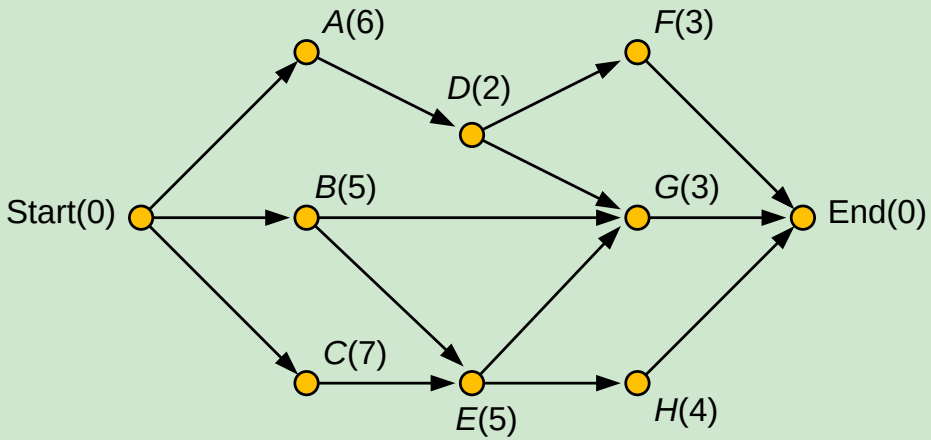

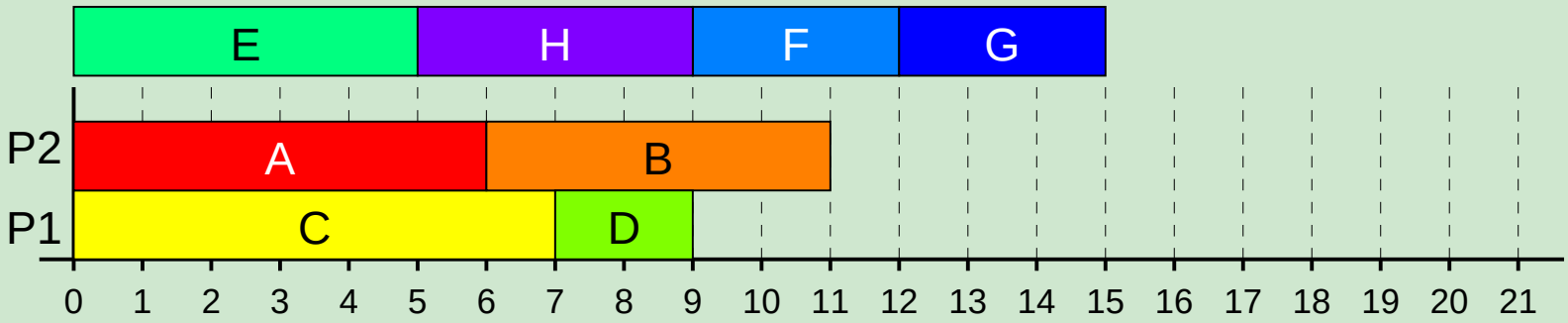

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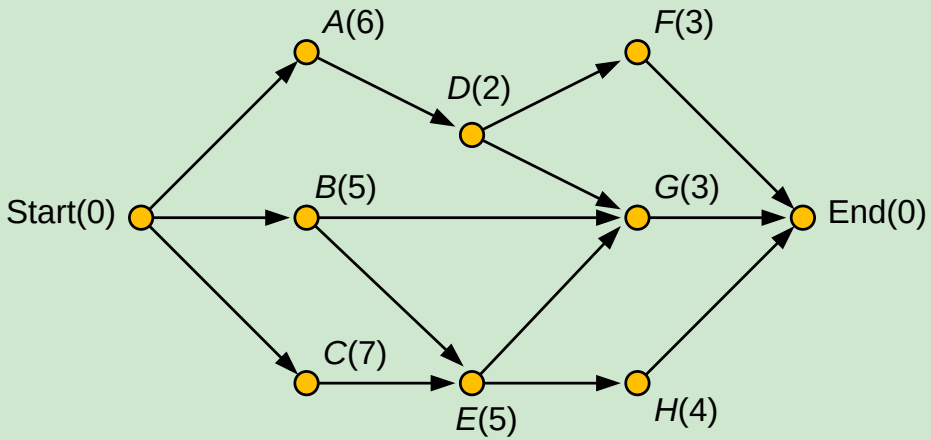

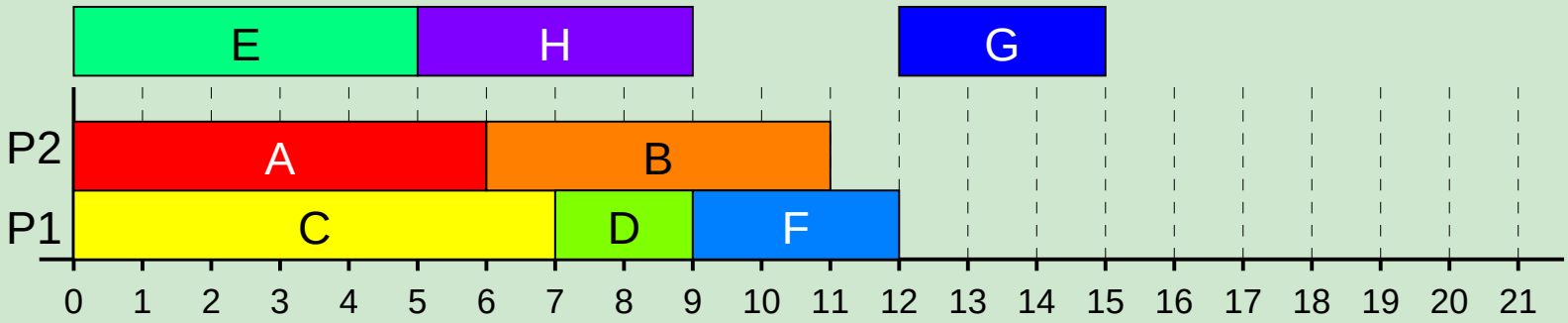

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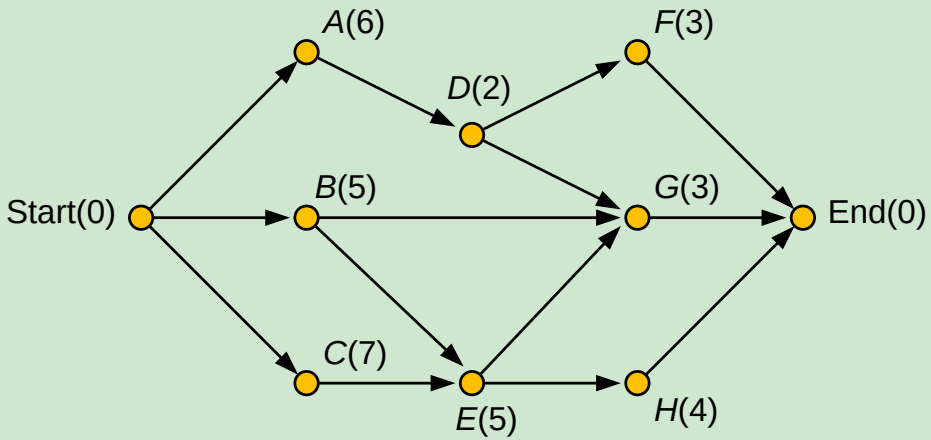

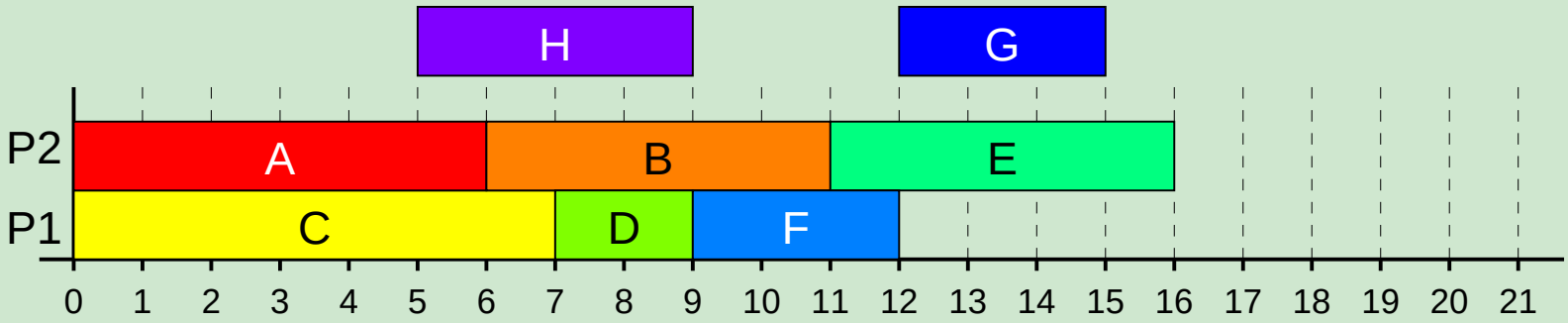

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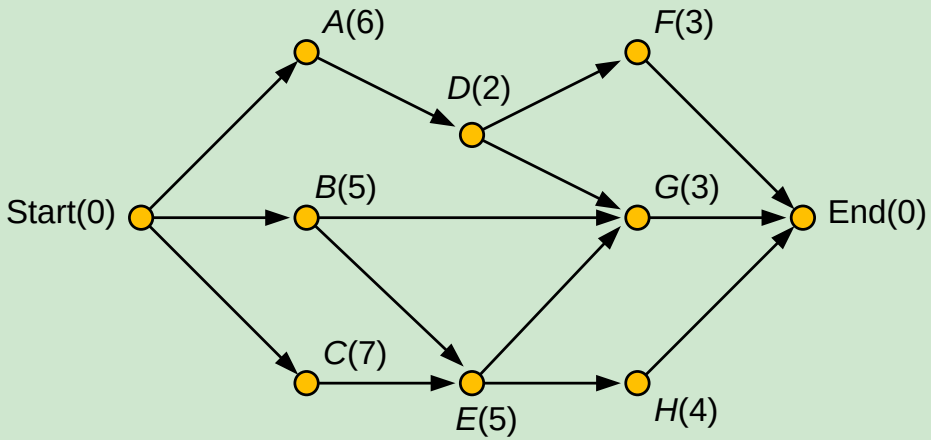

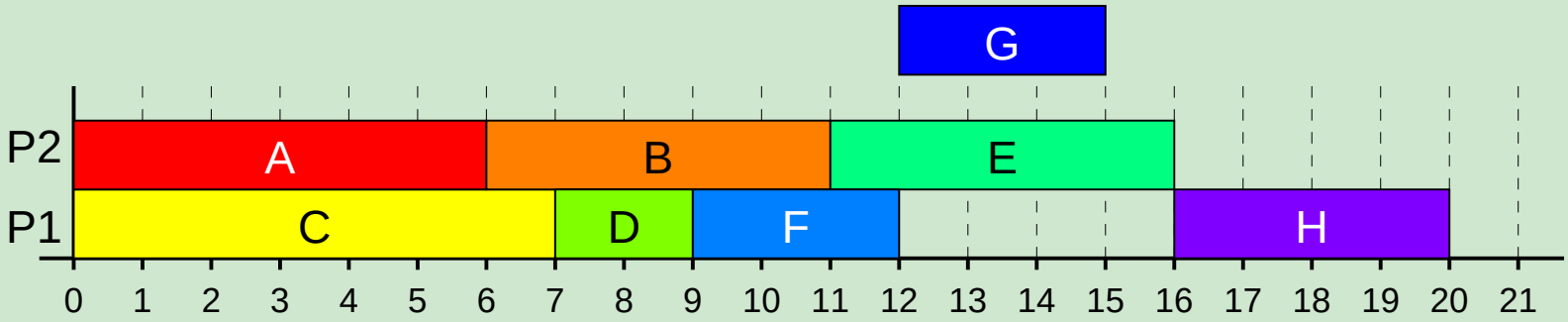

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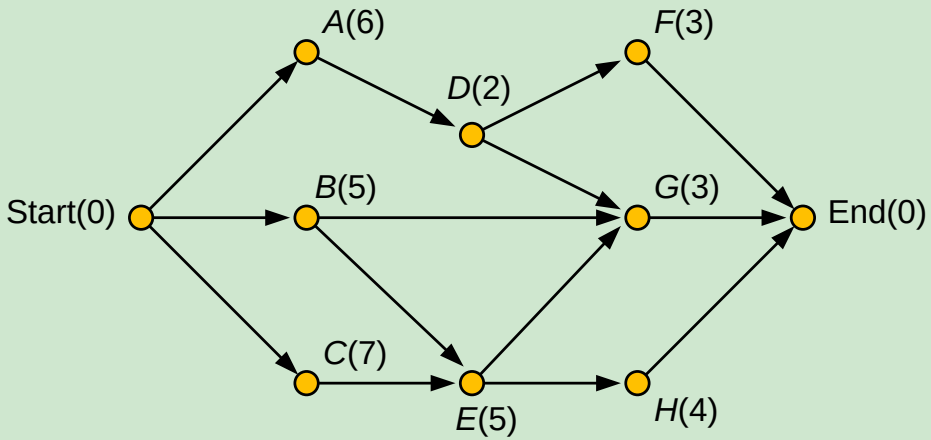

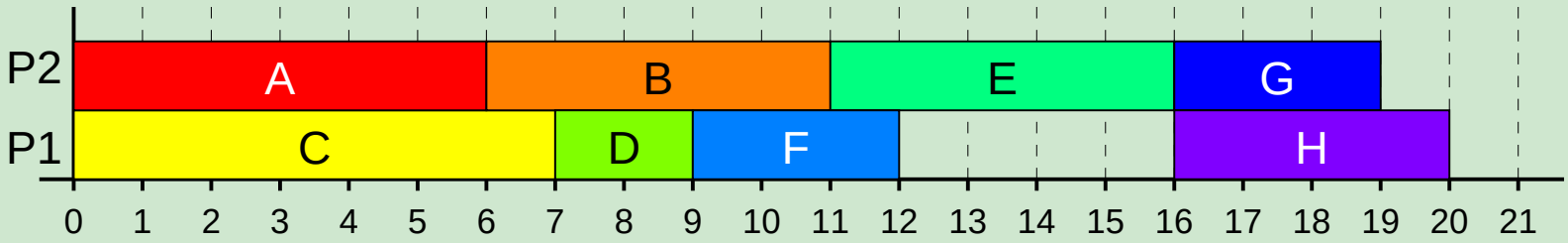

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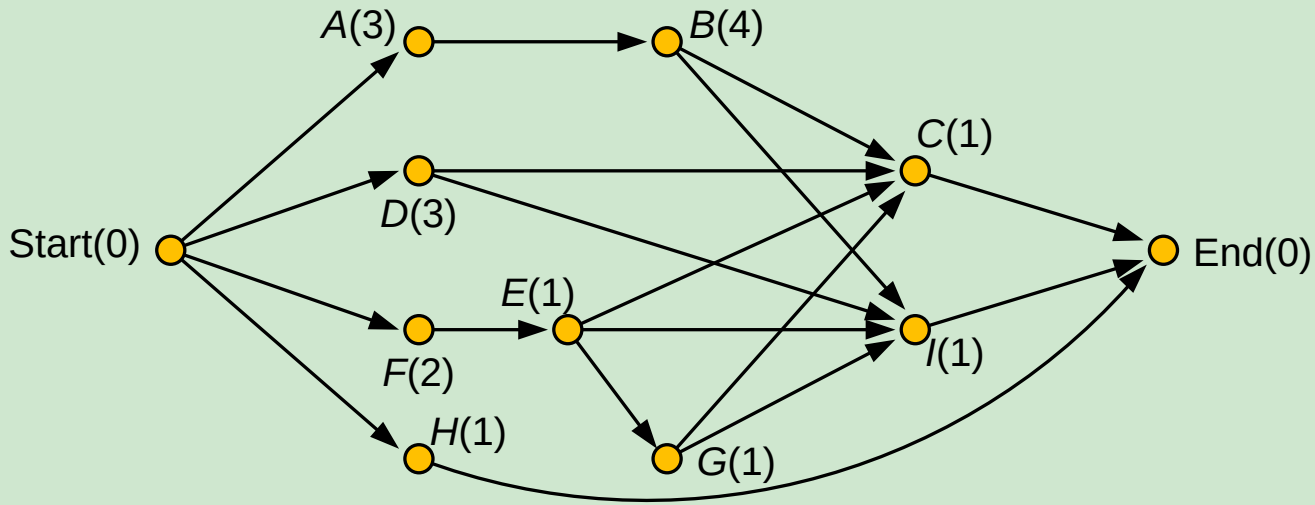

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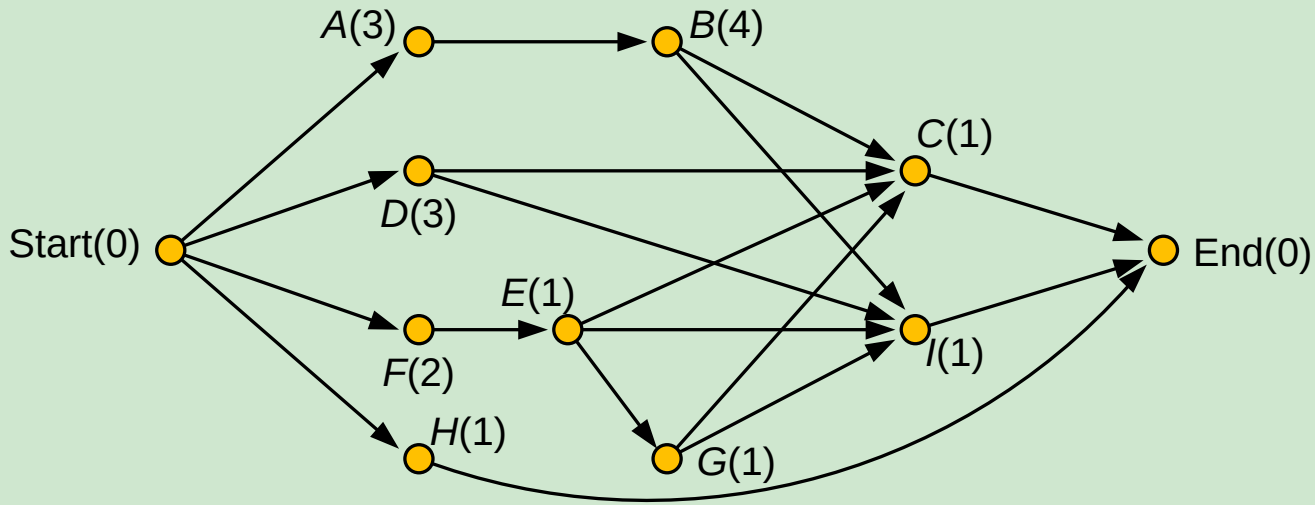

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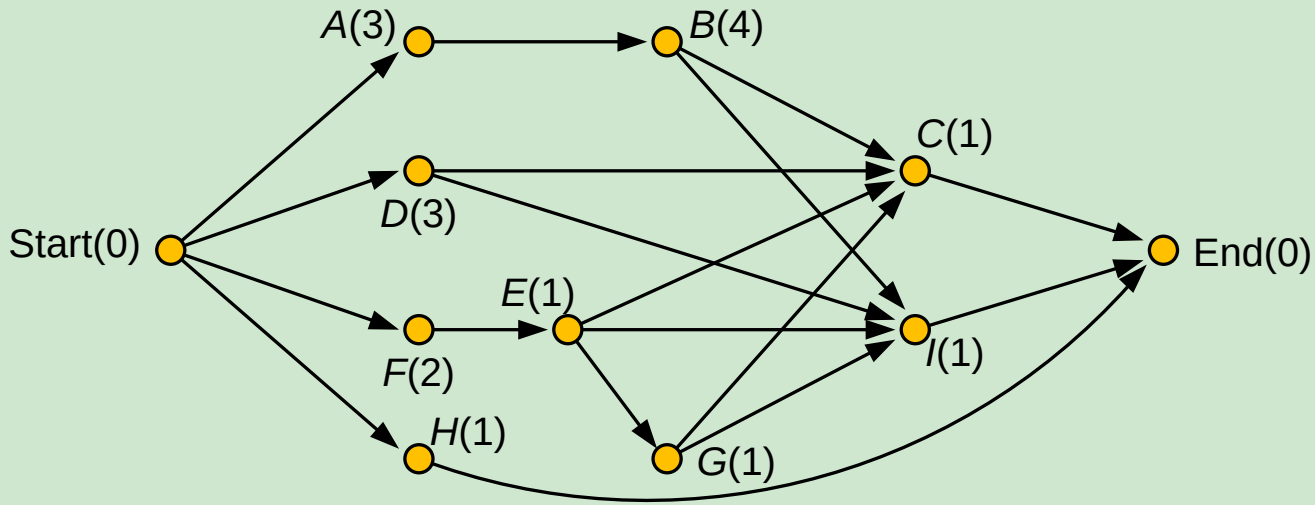

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Task	Label	Prec. Tasks
Set up tables and chairs	*TC*(1.5)	
Set tablecloths and napkins	*TN*(0.5)	*TC*
Make flower arrangements	*FA*(2.2)	
Unpack crystal, china, etc.	*CC*(1.2)	
Put place settings on table	*PS*(1.8)	*TN*, *CC*
Arrange table decorations	*TD*(0.7)	*FA*, *PS*
Set up the sound system	*SS*(1.4)	
Set up the bar	*SB*(0.8)	*TC*

- Schedule the project using 2 processors and the decreasing-time algorithm.

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- Chapter 8: Exercises 43, 44, 45, 46, 49.