4. Greedy Algorithms I

- earliest-start-time-first algorithm demo
Earliest-start-time-first algorithm demo

Consider lectures in order of start time:
  • Assign next lecture to any available classroom (if one exists).
  • Otherwise, open up a new classroom.
Earliest-start-time-first algorithm demo

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no available classroom: open up a new classroom and assign lecture to it
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lecture d is compatible with classrooms 1 and 3
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lecture e is compatible with classroom 1
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Consider lectures in order of start time:
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lecture f is compatible with classroom 2 and 3
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Consider lectures in order of start time:
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lecture g is compatible with classroom 2
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Consider lectures in order of start time:

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lecture h is compatible with classroom 3
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Consider lectures in order of start time:
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lecture j is compatible with classrooms 2 and 3
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lecture i is compatible with classroom 2
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\[ \text{done} \]