Lab 5 – Practice Greedy Algorithms

CS208 Algorithm Design and Analysis

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Slides adapted from Yao Zhao zhaoy6@sustech.edu.cn
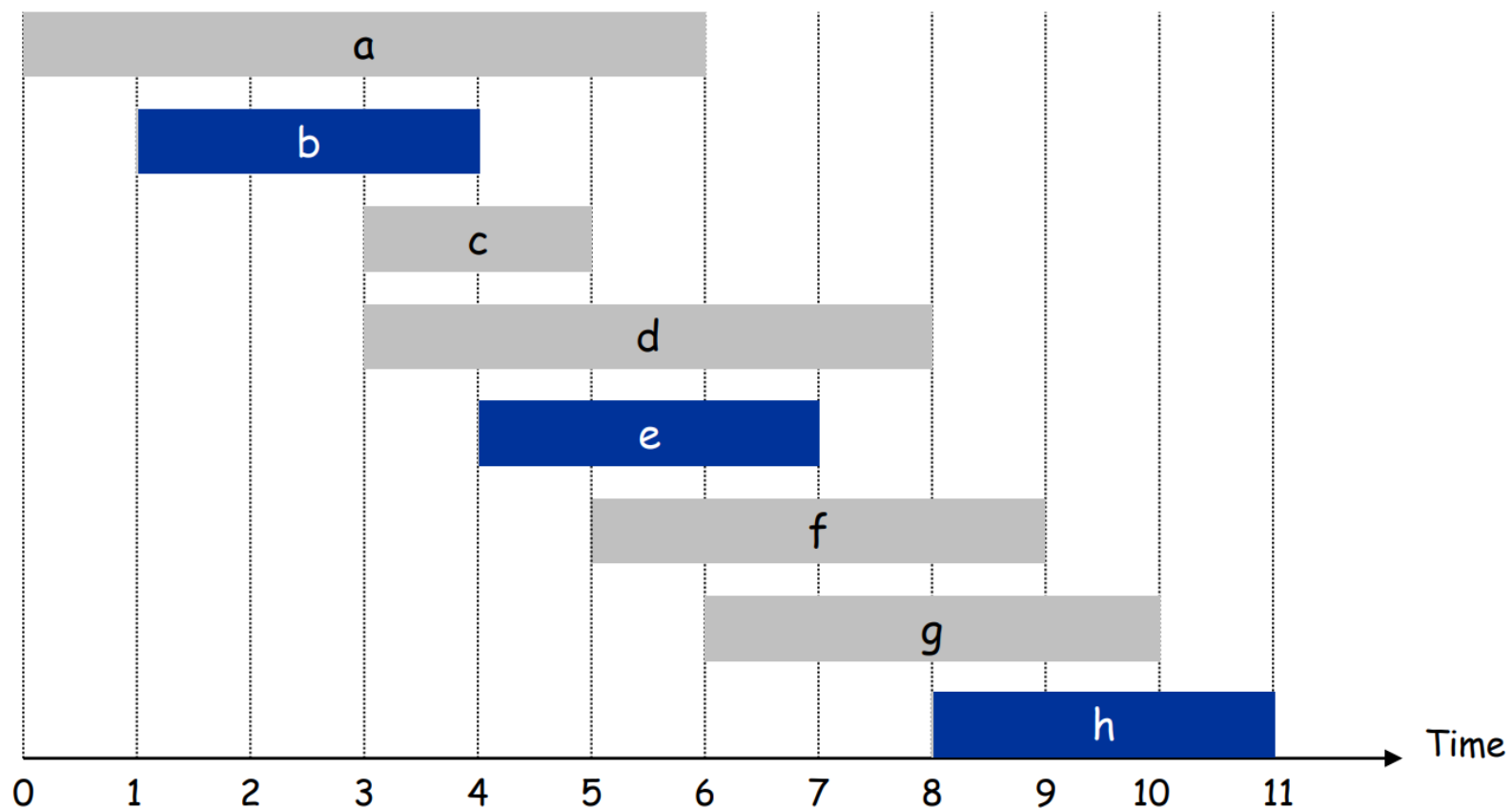
Question 1: Interval Scheduling

Interval scheduling.

- Job j starts at s_j and finishes at f_j.
- Two jobs compatible if they don't overlap.
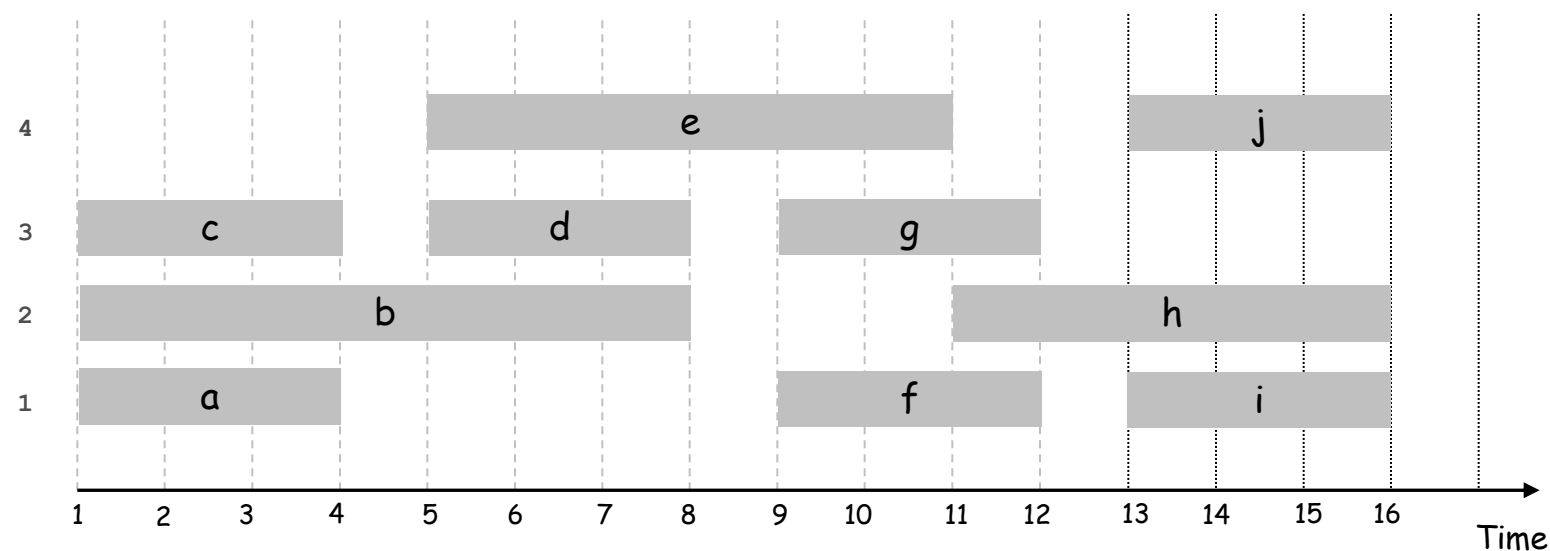- Goal: find maximum subset of mutually compatible jobs.

Sample input：
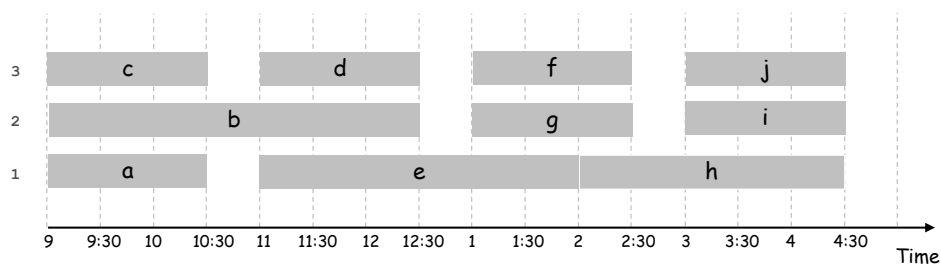
a 0 6
b 1 4
c 3 5
d 3 8
e 4 7
f 5 9
g 6 10
h 8 11

Sample output：
b e h

Question 2: Interval partitioning

Sample input:
a 1 4
b 1 8
c 1 4
d 5 8
e 5 11
f 9 12
g 9 12
h 11 16
i 13 16
j 13 16

Output:
c d f j
b g l
a e h

Grading

- Implement both Q1 and Q2. Evaluated within a week.
- Total point: 1