

CS 260: Homework 6

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August 11, 2017

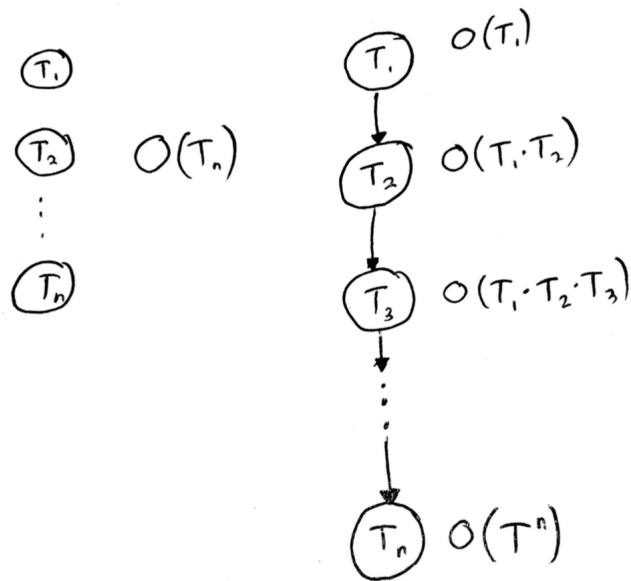
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1 1

$$M = \begin{bmatrix} . & a & b & c & d & e & f \\ a & X & 3 & X & 4 & X & 5 \\ b & X & X & 1 & X & X & 1 \\ c & X & X & X & 2 & X & X \\ d & X & 3 & X & X & X & X \\ e & X & X & X & 3 & X & 2 \\ f & X & X & X & 2 & X & X \end{bmatrix}$$

2 2

The tasks $t_1, t_2, t_3 \dots t_n$ can be run in parallel. If not, then the run time is the sum of $t_1 + t_2 + t_3 + \dots + t_n$. If run in parallel, then the run time is that of the task with the longest execution time. In parallel, the run time will be $O(t_n)$ where t_n is the longest execution time out of all of the tasks.



3 3

Strong components: b, f, d, b-c-d

4 4

Data: Insert edges

Insert edge between vertex i and j . Function Insert (i,j) **if** $i > n$ **or** $j > n$
then
| PRINT Edge is not between i and j
else
| insert i at the end of i insert j at the end of j
end

Data: Delete edges

Delete edge between vertex i and j . Function Delete (i,j) **if** $i > n$ **or** $j > n$
then
| PRINT Edge is not between i and j
else
| Delete i at the end of i Delete j at the end of j
end

5 1 How to make tables

1	2	3
7	8	9
12	13	14