HOMEWORK #3, MATH 441, FALL 2017

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Please note:

(1) You may work together on homework, but you must write up your own solutions individually. In particular, you must write your own code, spreadsheets, etc.

(2) You must acknowledge with whom you worked (specify their gradescope.com email addresses). You must also acknowledge any sources you have used beyond the textbook and class material.

(3) When you submit your homework to gradescope.com, you need to put the solutions to different problems on different pages; gradescope.com will ask you to identify which pages correspond to which problems.

(1) Use LP software to find the smallest possible time from Task 1 to Task 6, given the following wait times between tasks: here Wait(i, j) is the minimum amount of time after task i is scheduled that task j is allowed to be scheduled:

\[
\begin{array}{ccc}
    i & j & \text{Wait}(i, j) \\
    1 & 2 & 4.1 \\
    1 & 3 & 3.7 \\
    2 & 4 & 2.9 \\
    2 & 5 & 5.1 \\
    3 & 4 & 3.7 \\
    3 & 5 & 5.6 \\
    4 & 6 & 2.4 \\
    5 & 6 & 2.2 \\
\end{array}
\]

(2) Solve the dual LP, and explain how the solution corresponds to a maximum wait time path from Task 1 to Task 6.