1. Weighted interval scheduling. Here’s a set of intervals and their associated values:

\[ \begin{array}{c}
\text{a} & v(a) = 4 \\
\hline
\text{b} & v(b) = 6 \\
\text{c} & v(c) = 3 \\
\hline
\text{d} & v(d) = 4 \\
\text{e} & v(e) = 5 \\
\text{f} & v(f) = 7 \\
\end{array} \]

Show what happens when the algorithm you developed in class is run on this set of intervals. Your response should show both the optimal solution that our algorithm finds, and how the algorithm goes about finding it. (Note: wait until Monday to do this problem)
2. **Dynamic programming.** Explain in your own words the circumstances under which you’d use a dynamic programming algorithm.