1. Solve Exercise 15.2-1 in our textbook.

2. Solve Exercise 15.3-2 in our textbook.

3. Solve Exercise 15.4-1 in our textbook.

4. Solve Exercise 15.4-5 in our textbook.

5. Consider a generalization of the assembly line scheduling problem in which there are \( k \) assembly lines, instead of 2. Describe a dynamic programming solution to the problem and analyze its running time. Your expression for the running time should include \( k \) as a parameter.


7. Solve Exercise 16.2-2 in our textbook. See p425 of our textbook for the definition of the 0-1 knapsack problem.