Coding Assignment

Using any tool of programming language of your choice, write a code to run the wagner-within model, as discussed during the session.

Question 1

Consider the demand data used in the illustration of Wagner-Whitin algorithm (see lecture note). Consider h = 0.3 (instead of 0.4 used in the class). K remains the same. Determine the new optimal decision. You shall use spreadsheet for efficiency.

Question 2

Consider the demand data used in the illustration of the lot-sizing problem (see lecture note). Consider the original parameter values, i.e., K = 54 and h = 0.4. Only thing that is different now is that no order can exceed 200 (due to capacity constraint at the supplier's end). All the ordering decisions that we developed so far violates this condition. Find a way to incorporate this limit and obtain a reasonable solution. Note that I am looking for a method.

A method is called good if it meets two criteria: (a) it can be applied to any instances of the problem (i.e., different data) and (b) it produces reasonably good solution.