Best Buy Fitbits[1]

During the next four months Best Buy requires, respectively, 500, 650, 1000 and 700 units of Fitbits. No backlogging is allowed (that is, Best Buy's requirements must be met on time). Production costs are $50, $80, $40, and $70 per Fitbit during these months. The storage cost from one month to the next is $20 per unit (assessed on ending inventory). It is estimated that each Fitbit unit on hand at the end of month 4 can be sold for $60. Assume there is no beginning inventory and determine how to minimize the net cost incurred in meeting the demands for the next four months.

[1] This exercise problem and related solutions were originally developed by Ramesh Alla based on Practical Management Science 5th Edition. This vision is revised by Nowed Patwary.