

## Assignment-1

A farmer has recently acquired a 110 hectares piece of land. He has decided to grow Wheat and barley on that land. Due to the quality of the sun and the region's excellent climate, the entire production of Wheat and Barley can be sold. He wants to know how to plant each variety in the 110 hectares, given the costs, net profits and labor requirements according to the data shown below:

Crop	Cost (Rs/Hec)	Profit (Price/Hec)	Man-days/Hec
Wheat	7000	50	10
Barley	2000	120	30

The farmer has a budget of Rs. 7,00,000 and availability of 1,200 man-days during the planning horizon. Find the optimal solution and the optimal value.

