

Impossibility Results

Unequal pair [99,1]: - In this it is impossible to attain guaranteed harvest above 99 because in this it contains a pair of two arrays i.e. [99,1] in which 99 is the greatest harvest/growth each day to feed pam. In this we can attain a maximum harvest upto infinity (∞) as we don't cut the bamboo at 1 for ∞ days. So, the best attainable solution for guaranteed harvest is [0].

Panda Precision [2001,1999,1000]: - In this similar to unequal pair the best result for guaranteed harvest attained is 4000 as in start of the schedule only the 0th index is harvest after one day because the growth of other was not sufficient so it has limited the guaranteed harvest to 4000 as there are not many bamboos to choose from so the best outcome is [0,1,0,2] in this there might be better harvesting sequences but the guaranteed harvest can be not more than 4000 no matter how you pair it up.

Oversupply [10,10,5]: - Like precision oversupply is also limited to 20 guaranteed harvest due to only 3 bamboo trees possible. So, the most efficient way is [0,1] which cannot be further improved to get a better guaranteed harvest.