Analysis of Algarithms Assignment 6 Protik Dey (0 Ans: to the Ques: No: 1(a) Possible toll both position = 2 Running time fore calculating sum of money and regulation fore au tous 2 is o(n) So run time of brute force algorithm is o(n2") Ans: to the gues: No: 1 (b) operate Recursive definition of a [i]: We have to choose the optimal amount of toll between one previous optimes amount and one new optimal amount up to 4(j) + t (of the cure rent location). So Base case: a [0]=0 Otherwise: a [i] = max{acindex of e(i)] + t[i]
a [i-1]

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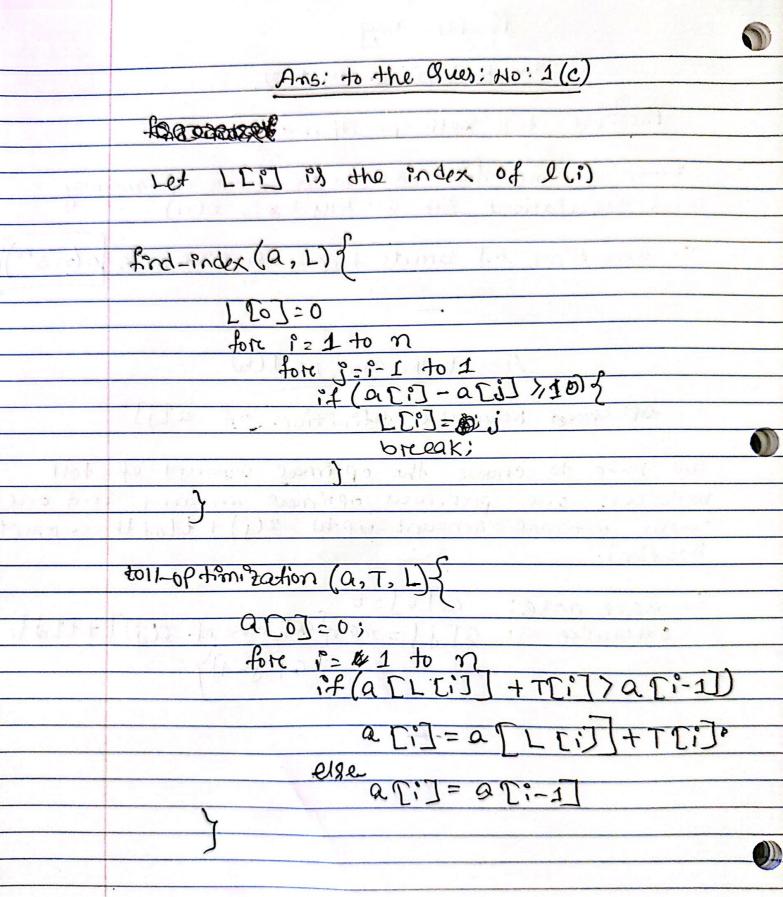
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Ans: to the Ques: No. 1 (d) Here, find-index function has a nusted 100p 60 run time of this function is o (n2). And toll-optimization has one loop, so run time is O(n). So overeal run time is