

600.363/463 Algorithms
Assignment 6
Due November 4, 2013

I. The Off-line minimum problem 21-1 in page 582.

II. The Depth determination problem 21-2 in page 583.

III. Solve the following recurrences. Assume appropriate initial values when needed.

1. $T(n) = 2T(n - 1) + 3T(n - 2)$,

2. $T(n) \leq 2T(n/3) + T(n/4) + T(n/12) + n$,

3. $T(n) \leq 2T(n/3) + T(n/4) + n$, and

4. $T(n) \leq 4T(n/2) + n^2 \log n$.