COP-3530, Data Structures

Assignment #1

Rubric

Problem #1 (20 pts)

(a)

- Correct algorithm (5)
- Efficient solution (7)
- Organization, documentation/meaningful comments (3)

(b)

- Correct calculation and justification of the running time complexity of the proposed algorithm (5)

Problem #2 (30 pts)

- Program shows correct output (10)
- Program is efficient (sublinear running time complexity) (16)
- Organization, documentation/meaningful comments (4)

Problem #3 (50 pts)

(a)

- Correct output (5)
- Algorithm design (17)
    - Efficient (sub-linear) and correct implementation of the algorithm.
- Organization, documentation/meaningful comments (3)

(b.1)

- Program shows correct output (4)
- Correct implementation of recursive solution (6)
- Program is efficient (sublinear running time complexity) (5)
- Organization, documentation/meaningful comments (2)

(b.2)

- Correct calculation and justification of the running time complexity (4)

(b.3)

- Correct calculation and justification of the total number of multiplications (4)