

CS180 Fall 19 Homework 2

assigned 10/9, LATEST due date 10/16 at 9:59 am (or earlier)

All algorithms/proofs should be in bullet form: step by step or psuedo code.

1. Exercise 3 Page 107
2. Exercise 4 on Page 107
3. Exercise 9 on page 110
4. Exercise 11 on page 111
5. Exercise 12 on page 112
6. An array of n elements contains all but one of the integers from 1 to $n+1$.
 - (a) Give the best algorithm you can for determining which number is missing if the array is sorted, and analyze its asymptotic worst-case running time.
 - (b) Give the best algorithm you can for determining which number is missing if the array is not sorted, and analyze its asymptotic worst-case running time.