

## CS 180

Review problems for topics covered since midterm 2 (but not on previous homework)

1. R-9.4 from page 475 of the text.
2. Draw the AVL tree that results from inserting the elements 1, 2, 3, 4, 5, 6 (in that order).
3. Draw the AVL tree from the previous problem after inserting 7, 8, 9 (in that order).
4. R-11.12 on page 570 of the text.
5. Using the Huffman tree from the previous problem, write the binary encoding of the message “spot soda too”.
6. How many bits did your encoding of the message in the previous problem take? How many bits would a standard ASCII encoding have taken (assuming 8 bits per character)?
7. Hashing: Problems R-8.4 to R-8.6 on page 4.5 of the textbook.
8. Problem R-8.14 on Page 4.6 of the textbook.