Homework 5
Fundamental Algorithms, Spring 2008, Professor Yap

Due: Wed Apr 9, in class.

INSTRUCTIONS:

- Please read questions carefully. When in doubt, please ask.

- Please write succinctly, to the point. Every sentence must be an complete English sentence.

- You may post general questions to the homework discussion forum in class website. Also, bring your questions to recitation on Monday.

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1. (0 Points)
   Exercise 1.1. (All Exercises in this homework refers to Lecture V)

2. (0 Points)
   Exercise 1.2. (Do not hand in problems with 0 Points.)

3. (2 Points)
   Exercise 1.3.

4. (0 Points)
   Exercise 1.4.

5. (8 Points)
   Exercise 1.5.

6. (10 Points)
   Exercise 1.8. [NOTE: This is an open-ended problem.]

7. (10 Points)
   Exercise 2.3.

8. (10 Points)
   Exercise 3.3.

9. (15 Points)
   Exercise 3.10.

10. (10 Points)
    What binary string would you transmit in order to send the string `now is the time`, under the dynamic Huffman algorithm? Show your working. Note: you would have to transmit ascii codes for `n`, `o`, etc. Just write `ASCII(n)`, `ASCII(o)`, etc, for them.