1. Explain and give an example of the following terms:
   a. (5%) WiMax
   b. (5%) Web-log (BLog)
   c. (5%) Wiki
   d. (5%) Cloud Computing

2. (20 %) Give the preorder sequence: ABCDEFGHI and inorder sequence: CBAEDGHFI, please construct the corresponding binary tree step by step.

3. (20 %) Give the frequency table

letter	frequency
N	15
L	10
T	5
O	20
K	25

   What is the Huffman code of the message "NLTOKOK"? Show your work.

4. Consider the following C program
   ```
   int A（int m，int n）
   {
       int k；
       while（n！＝0）
       {
           k＝m%n；m＝n；n＝k；
       }
   }
   ```
   a. (5%) What is the value of A(48, 36) ?
   b. (15%) Rewrite the above program using recursion.

5. （20%）Write a program to print the prime number x, 50<x<200 (using for loop).
   Hint:
   a. A prime number is a natural number that has exactly two *distinct* natural number divisors: 1 and itself.
   b. You don't need to concern the best program running time.
   c. You can use "2 ≤ i < x and x % i ＝＝ 0" to diagnose x is a prime number or not.