COEN 11 - Winter 2013 - Practice VII

Solutions on Wednesday

1. What does function a output?

   ```c
   void
   a ( )
   {
       int    x = 0;
       char   str[10] = "abc";

       x = b (str);
       printf ("%d\n", x);
   }

   int
   b (char *p)
   {
       if (*p == '\0')
               return (0);
       return (b (p + 1) + 1);
   }
   ```

2. Write a recursive function to traverse a string copying every other character to a second string.

3. Write a recursive function to reverse a linked list. Hint: You may need to pass two pointers into the function.

4. Write a recursive function to calculate the nth number in a series of numbers which is defined as follows:

   - 1st number = 1
   - 2nd number = 2
   - 3rd number = 3
   - nth number = average of the 3 previous numbers