CS 210 – Fundamentals of Programming I
Fall 2006 – Programming Assignment 2
20 points
Out: September 7
Due: September 14

This programming assignment consists of two very short programs.

1. We would like a program that asks a user for a number representing an Evansville TV channel, and displays the call letters corresponding to that number, or some message indicating the the channel is not in use. Use the following channel numbers and call letters:

   7 : WTVW
   9 : WNIN
  14 : WFIE
  19 : WWAZ
  25 : WEHT
  31 : KET
  44 : WEVV
  63 : WTSN

   For example, your program might produce output that looks something like:

   Please enter an Evansville TV channel number: 9
   The call letters for this channel are: WNIN

   (a) (3 points) Write an analysis and design for this program using the case construct (if statements will not be acceptable for this problem),

   (b) (7 points) Write the C++ program that corresponds to the analysis and design of part (a).

2. We would like a program that will compute and display the sum of the numbers between two integers \( m \) and \( n \) inclusive, where it is assumed that \( m < n \). That is, the computed sum is \( m + (m+1) + (m+2) + ... + n \).

   For example, your program might produce output that looks something like:
Please enter two numbers, the first one less than the second: 4 8
The sum of the values between 4 and 8 inclusive is: 30

(a) (3 points) Write an analysis and design using the for loop construct (a while loop will not be acceptable for this problem) for this program.
(b) (7 points) Write the C++ code that corresponds to the analysis and design of part (a).

Use the format shown in class and in the on-line handout An Analysis and Design Style Guideline. Write the analysis and design as a comment block in the implementation source file as shown in the on-line handout A C++ Programming, Style Guideline for CS 210.

Follow the guidelines in the on-line handout A C++ Programming, Style Guideline for CS 210. As stated in the syllabus, part of the grade on a programming assignment depends on how well you adhere to the guidelines. The grader will look at your code listing and grade it according to the guidelines.

Electronically submit your source files (the .cpp files) by emailing them as attachments to cs210@cserver.evansville.edu by 5pm on the due date. (Make sure you send it to cserver.evansville.edu. If you send to just evansville.edu, it will not be delivered.)

Please note: If you write this program using a system other than Visual Studio, please make sure that your program will compile and run under Visual Studio before you turn it in. Also check that the code is formatted correctly under the Visual Studio editor.