Assembly Program Format

Assembly language programs for the 8051 should be turned in using the following format:

; Your Name
; Assignment number
; Date
;
; Header describing what program does
;
P4 EQU 0C0h ; P0 to P3 are already defined
; List all segment names here. For example
Main SEGMENT CODE
More SEGMENT CODE
Less SEGMENT DATA
;
RSEG Main ; Declare segment
; Put main program here
...
...
Last: sjmp Last ; effective halt at end of main
;
RSEG More ; Declare relative segment
...

Code for this segment
...

Put any additional segments here

END ; Final directive indicating end
; of all code

A complete example is given on the following page.
; Joe Student
; Assn 0
; August 27, 2010
;
; AT89C51Test.A51
; This program counts up on Ports 0, 1, 2, and 3 and toggles P4.0
; so that P2 goes to the D to A converter. The D to A converter
; will have a ramp function on it and all the other ports will
; count up forever.

P4   EQU 0C0h

MAIN SEGMENT CODE
CSEG at 0000h
  LJMP Start

RSEG MAIN
Start: inc P0 ; increment port 0 to port 3
  inc P1
  inc P2 ; port 2 is D to A port
  inc P3
  setb P4.0 ; trigger write to D to A
  clr P4.0
  setb p4.0
  sjmp Start ; loop forever
END