Project 3 due 3/30/15 at 11:59 PM (nearly midnight)

For this project you are to implement pass 1 of the assembler.

Pass 1 should construct the symbol table, the addresses associated with each instruction, addresses of each label. The input file will be in fixed format:

Col 1-8 label optional
Col 9 blank
Col 10 + optional
Col 11-17 mneumonic
Col 18 blank
Col 19 #, @, = ... optional
Col 20-29 (operand) label, register, ',',X optional ...
Col 30-31 blank
Col 32-80 comments optional (NO PERIOD REQUIRED)

There may be blank lines in the source file.
Your project should report the listing and the contents of the symbol table to the screen. Your project should assemble all of SIC/XE and be equivalent to sicasm. Extra credit will be awarded for additional features currently not included in sicasm such as EQU, CSECT, USE, etc. All test files will be entered in upper case. Appropriate error conditions such as duplicately defined labels or undefined labels. Invalid mneumonics should be ignored in maintaining your addresses and your assembler should continue processing. All appropriate errors must be reported including invalid mneumonics. You should anticipate project 4 as pass two, thus you might, in the design of pass 1, consider pass 2.

You may include any other files as you desire in your shar. Be sure to test the integrity of your shar.

You may include any other files as you desire in zip/rar format. Make sure to test the integrity of your zip/rar files and only after this testing procedure has been accomplished you should submit your project.