**Sierra College MECH-01**

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**Application 10**

1. **Compiling, Programming, and Executing**
2. Compiling the Program
3. Open Microcode Studio.
4. Open a New program file. Take the preset header (with all the asterisks (\*) around it off.
5. Cut and paste the program from “Theory” into Studio (see next page).
6. Rename the program something you will remember
7. Save the program anywhere you like on the hard disk, but SAVE IT TO YOUR FLASH DRIVE as well. Be sure to save it as a .bas file and not a .pgp or other suffix file. **Note that at the end of class, the hard disk copy will be erased**.
8. Exit Studio
9. Reopen studio and open your program FROM YOUR FLASH DRIVE
10. Look the program over to be sure that it is the one you “wrote” or pasted.
11. Compile the program with the Compile Program command.
12. If the program shows errors, fix the errors. Otherwise, the program should show “Compile Successful No Errors.



1. Your flash drive should have the following files on it (this is mine, yours should have your initials on it):



1. Your hex file will look something like this:

:020000040000FA

:10000000012883160830850087018312071683169E

:0E001000071283128A01062863008A010C2859

:02400E00FC3F75

:00000001FF

1. Take your BASIC .bas file and your Compiled .hex file to the instructor for programming.

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1. Using a trainer, construct the circuit in “LED Test” below. You may use a dummy or scrap 14 pin to lay out the connections before installing the actual microcontroller chip. Test the LED, and then see if pin 6 of the microcontroller lights the light. Put the free end of the resistor on any pin but 1 and 6 to see if any of the other pins are HIGH (+5 volts). No other pin should light the LED

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