

## **CoE3DJ4 Lab 8051 Assembler and Download Instructions**

- 1) Add the location of the assembler to your path by typing:

**PATH=%PATH%;Z:\ASM51**

Make a copy of the "**MOD51**" file in your working directory.

- 2) Enter your assembly language program. Use a Text editor such as the DOS Editor or Notepad. Ensure the file extension is ".ASM".

Eg. **EDIT MYPROG.ASM**

Note: If you use Notepad be aware that it uses a default file extension of .TXT

- 3) Assemble your program by typing the following from within a DOS window:

**ASM51 MYPROG.ASM**

If there are no errors the assembler will produce an Intel HEX file called  
MYPROG.HEX

- 4) Download the Intel HEX file to the 8051 board as follows:

- a) Start HyperTerminal by clicking on the MCM51 icon on your desktop.
- b) Turn on the power to the 8051 board. You should see a list of monitor commands listed on the screen and a "#" prompt should appear.
- c) Type "L" in the monitor to begin a download. The MCM51 board will then wait for a hex file to be sent.
- d) Send your HEX file by clicking on the "Transfer" menu item then select "Send Text File"
- e) A dialog box will appear that will allow you to select your HEX file. After selecting your HEX file the download will begin. You will see hexadecimal characters appear on the screen as the download proceeds.

- 5) After the download has finished successfully start running your program by typing the following command:

**G8000**

where 8000 is the hex address in memory where your program resides.