Assignment 10 - Intel 8088 Programming

Due November 30, 1995

Question 1

Write a program in 8086 assembly language that does the following:

- prints your name[1] and student number followed by a carriage return and line feed using DOS int 21h function 2 (load AH with 2 and the character to be printed in DL).
- reads 8 characters from standard input using DOS int 21h function 1 (load AH with 1, character is returned in AL).
- prints another carriage return and line feed.
- prints the 8 characters in the reverse order they were read in.
- terminates using DOS int 21h function 04CH (load AH with 04Ch).

Assemble, link and test your program (see instructions below).

The source code file name should be ASG10.ASM and the executable should be ASG10.EXE. Submit only the .ASM and .EXE files on a 3.5 inch disk. If your program does not terminate properly (i.e. crashes the machine) *please* don't submit a .EXE file. The marker will run your program and check your source code.

Using the 8088 Assembler

You can get a copy of a free 8088 assembler (in zip format) from the ELEC 464 Web page. The command to assemble the program is `asm asg10` and the comand to link your program into an EXE file is `val asg10`. The programs will prompt for the names of the output files (press Enter to accept the defaults).

You may also use the assembler included with the Borland C++ IDE installed on the PC's in the third floor labs.

The source for the sample file used in the lecture `ex15.asm` is also available on the course web page if you want something to start with.

[1] Don't use the label NAME though, it confuses the assembler).