

Using the P10 microprocessor simulator software

The file *p10.zip* unzips into a folder containing files with extensions *.ASM* and *.CLASS*. Save the *p10.zip* file and execute your unzip utility on it, putting the results in a folder, *p10*, in the root *C:* directory. This location is suggested for convenience. You will need to change-directory to the *p10* directory from the command line in order to use the *p10* software.

P10 is a Java program that runs from the command line on a Java-enabled computer. The command line is available in Windows at Start / Programs / Accessories / Command Prompt.

To run *P10*, first, in the command environment, change directory to your *p10* directory. If your *p10* directory is saved at the root of the *Y:* drive, do as follows:

```
Y:> cd p10
```

Then type at the command line: `java p10`. Then choose *N* for New Program and enter the name of an assembler-language file, such as *t1.asm*, without the extension *.asm*. Then choose *E* for Execute. The simulator, *P10*, will run, simulating the execution of the *.asm* program, and will produce a trace of the execution in a file with the extension *.trc*. For example the commands:

```
java p10
n
t1
e
```

will produce a file *t1.trc*, a text file that contains the trace of *t1.asm*. You may look at *t1.asm* or *t1.trc* using Notepad. You may create and test your own *.asm* programs. Problem C in the group work consists of running a simulation of *xy.asm*, and problem sets D and E involve writing and testing short *.asm* programs.