FDA125 Advanced Parallel Programming February 2007

Exercises for Topic III (Programming in Fork)

Exercise III.1

Read Chapter 1 of *Practical PRAM Programming*, which gives a quick start to programming in Fork.

Exercise III.2

Read Appendix C (*Installation Guide*) of *Practical PRAM Programming* and install the Fork compiler, SBPRAM simulator and system software on a Solaris system available to you.

The software packages can be downloaded at the Fork homepage,

`http://www.ida.liu.se/~chrke/fork.html`

Remark: The `Makefile` used to build the Fork compiler and its documentation uses `dvips` to create postscript files. However, IDAs version of `dvips` automatically sends the ps file to the printer, which is not intended. In my own configuration I locally redefined `dvips` to remove this side effect. Another simple workaround is to comment out these lines in the Makefile or to use the IDA version's flags `-o` to specify the output file name.

Exercise III.3

Get familiar with the Fork compiler and simulator. Try `hello.c` and other examples from the `examples` directory. Run with different numbers of simulated processors.

When building your own Fork programs, we recommend that you extend the `Makefile` in the `examples` directory accordingly.