

Phase One Time-Sharing

A subsystem, named TSS, permits multiple simultaneous use of the Phase One system, in a restricted way. Users at terminals, when TSS is in operation, may use any subsystem, including SED and ARS in the debugging of SIMPLE programs and APL experiments. There will certainly be occasions when it will not be feasible to operate the system in this multi-user environment, but TSS should be usable for a large portion of system-development work. It is currently set up for one APL terminal and two SIMPLE terminals. These numbers can be adjusted as terminal needs and/or efficiency consideration dictate.

Rules for USERS

- (1) Two users may not edit, compile or debug the same program simultaneously.
- (2) While debugging, spend as little time as possible in execution of the debugged program (both APL and SIMPLE). Other users are preempted between a DO or GO command and the corresponding breakpoint or trap.
- (3) All user programs must follow the rules for subsystems. Programs that have open/locked segments or use the subprocess facility should not be debugged in the multi-user environment. APL experiments with more than one process should not be executed or debugged in the multi-user environment.

Rules for Subsystems

- (1) Close all files as soon as possible and definitely before exit.
- (2) Open files windowed whenever possible (as opposed to locked).
- (3) Make data segments as SMALL as possible.
- (4) Don't issue a close without a corresponding open. (You may close a file opened by another user.)
- (5) Surround sections of code which require open/locked segments with runtime calls preempt () and unpreempt ().
- (6) Subsystems that barely fit in core may not fit under TSS because TSS uses approximately 5 pages. (USE of the IN command before starting TSS may be used to compensate for this problem.)