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Team #16

## Lab 1 - Writeup

### Files Changed

- `proc.h`
  - Added `int status` to `proc` struct to store the exit status into a variable
- `syscall.h`
  - Defined `SYS` calls for `exits`, `waits`, and `waitpid` and assigned them each numbers
- `syscall.c`
  - Added `extern int sys_exits(void)`, `extern int sys_waits(void)`, and `extern int sys_waitpid(void)`
  - Added `[SYS_exits] sys_exits`, `[SYS_waits] sys_waits`, `[SYS_waitpid] sys_waitpid` which mapped the extern declarations to the `sys` calls
- `proc.c`
  - Added new function `void exits(int status)` to store an exit status in `curproc`
  - Added new function `int waits(int *status)` to return status of child process that has been terminated (makes sure to store status before returning the `pid`)
  - Added new function `int waitpid(int pid, int *status, int options)` which waits for the process with the specified `pid` (passed in as a parameter) to terminate before continuing
- `user.h`
  - Added system calls `int exits(int) __attribute__((noreturn))`, `int waits(int*)`, and `int waitpid(int, int*, int)`
- `usys.S`
  - Added `SYSCALL(exits)`, `SYSCALL(waits)`, and `SYSCALL(waitpid)`
- `defs.h`
  - Added `void exits(int)`, `int waits(int*)`, and `int waitpid(int, int*, int)`
- `sysproc.c`
  - Added `int sys_exits(void)`, `int sys_waits(void)`, and `int sys_waitpid(void)` declarations
- `Makefile`
  - Added `"lab1"` to `UPROGS` commands so it could be executed from inside the shell of `xv6`
- `lab1.c`
  - Added given lab 1 test file to test code