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/* pipes.c
** -- using POSIX pipes
** cs180 1/08
*/

#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <unistd.h>
#include <sys/wait.h>

int main(void)
{
    int pid;
    char buffer[1024];
    int descriptor[2];
    /* descriptor[0] - for reading
    ** descriptor[1] - for writing
    */

    // pipe() is a system call returns 2 file descriptors
    //
    pipe(descriptor);
    pid = fork();

    if (pid == 0) {
        /*Child's code */
        close(0);
        dup(descriptor[0]);
        close(descriptor[1]);
        close(descriptor[0]);
        execlp("wc", "wc", "-l", NULL);
    }
    else {
        /* Parent's code*/
        close(1);
        dup(descriptor[1]);
        close(descriptor[1]);
        close(descriptor[0]);
        execlp("grep", "grep", "int", "simple-pipe.c", NULL);
    }
    return 0;
}
```