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/***************************
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Project: Final
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File: grep.c
***************************/
#include "ucode.c"

int readLine(int in, char*buf)
{
    int ok, i = 0;
    char c;
    while(1)
    {
        ok = read(in, &c, 1);
        if(!ok)
        {
            return 0;
        }
        if(c == '\n' || c == '\r')
        {
            buf[i++] = '\n';
            return i;
        }
        else
        {
            buf[i++] = c;
        }
    }
}

main(int argc, char** argv)
{
    int in = 0, stdout = 1, i = 0, ttyout;
    char buf[1024], c, *tty; //c is used as input char
    gettty(tty);
    ttyout = open(tty, O_WRONLY); //write to stdout

    if(argc == 3)
    {
        in = open(argv[2], O_RDONLY);
    }

    while(readLine(in, buf))
    {
        if(strstr(buf, argv[1]))
        {
            write(stdout, buf, strlen(buf));
            write(ttyout, "\r", 1);
        }
        i = 0;
        bzero(buf, 1024);
    }

    exit(1);
}
```