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#include "ucode.c"

char *cp, mytty[64];

char realname[64], linkname[64];
char newline = '\n';
char CR = '\r';

int main(int argc, char *argv[])
{
    int fd, i, n;
    char buf[1244], dummy;
    char *cp;

    print2f("Now Running Cat \n\r");

    fd = 0;
    //if theres more than one arg, then attempts to open the file
    if (argc > 1)
    {
        fd = open(argv[1], O_RDONLY);
        if (fd < 0)
        {
            printf("cat %s error\n", argv[1]);
            exit(0);
        }
    }

    //cat from stdin
    if (argc < 2)
    {
        //while typing in a line
        while (gets(buf))
        {
            //print the line, then format
            print2f(buf);
            print2f("\n\r");
        }
        exit(0);
    }

    //catting a file
    //while youre still reading from a file --
    while ((n = read(fd, buf, 1024)))
    {
        buf[n] = 0;
        cp = buf;

        //if theres a file
        if (fd)
        {
            //for n characters
```

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55     for (i = 0; i < n; i++)
56     {
57         //writes to stdout
58         write(1, &buf[i], 1);
59         if (buf[i] == '\n')
60             //writes \n to error to not mess with spacing
61             write(2, &CR, 1);
62     }
63 }
64
65 else
66 { // fd=0 case
67     cp = buf;
68     //if *cp is '\r'
69     if (*cp == '\r')
70         //writes to stderr
71         write(2, &newline, 1);
72     //writes to stdout
73     write(1, cp, 1);
74 }
75 }
76
77 close(fd);
78 exit(0);
79 }
80
```

