

C listing: RAWCOOK.C

```

/*****
/*
/*          R A W C O O K
/*
/*-----*/
/* Task      : provides two functions for
/*             switching a character device driver into the RAW
/*             or into the COOKED mode
/*-----*/
/* Author     : MICHAEL TISCHER
/* developed on : 08/16/87
/* last Update  : 04/07/95
/*-----*/
/* (MICROSOFT C)
/* Creation    : MSC RAWCOOKC;
/*             LINK RAWCOOKC;
/* Call        : RAWCOOKC
/*-----*/
/* (BORLAND TURBO C)
/* Creation     : through command RUN in the menu
/*-----*/
*****/
```

```
#include <dos.h>
#include <stdio.h>
#include <conio.h>

/* include Header files */
```

```
#define STANDARDIN 0      /* handle 0 is the Standard input device */
#define STANDARDOUT 1    /* handle 1 is the Standard output device */
```

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/*****
/* GETMODE: read the attribute of a device driver
/* Input   : the handle must be connected with the addressed device
/* Output  : the device attribute
*****/
```

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/*****
int GetMode(Handle)
int Handle;                                /* points to the character driver */

{
    union REGS Register;                    /* register-Variable for Interrupt call */

    Register.x.ax = 0x4400;                 /* Function number for IOCTL: Get Mode */
    Register.x.bx = Handle;
    intdos(&Register, &Register);          /* Call DOS-Interrupt 21H */
    return(Register.x.dx);                  /* Pass device attribute */
}

/*****
/* SETRAW : Change a character driver into RAW mode */
/* Input  : the handle passed must be connected with the addressed */
/*          device */
/* Output : none */
*****/

int SetRaw(Handle)
int Handle;                                /* points to the character driver */

{
    union REGS Register;                    /* register-Variable for Interrupt call */

    Register.x.ax = 0x4401;                 /* Function number for IOCTL: Set Mode */
    Register.x.bx = Handle;
    Register.x.dx = GetMode(Handle) & 255 | 32; /* new device attribute */
    intdos(&Register, &Register);          /* Call DOS-Interrupt 21H */
}

```

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/*****
/* SETCOOKED: Changes a character driver into the COOKED mode      */
/* Input      : the handle passed must be connected with the device */
/*              addressed                                           */
/* Output     : none                                              */
*****/

int SetCooked(Handle)
int Handle;                                /* points to the character driver */

{
    union REGS Register;                  /* register-Variable for Interrupt call */

    Register.x.ax = 0x4401;               /* Function number for IOCTL: Set Mode */
    Register.x.bx = Handle;
    Register.x.dx = GetMode(Handle) & 223; /* new device attribute */
    intdos(&Register, &Register);        /* Call DOS-Interrupt 21H */
}

/*****
/* TESTOUTPUT: outputs a Test-String 1000 times on the Standard   */
/*              output device                                       */
/* Input       : none                                              */
/* Output      : none                                              */
*****/

void TestOutput()

{
    int i;                                /* Loop Variable */
    static char Test[] = "Test.... ";    /* the text for output */

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printf("\n");
for (i = 0; i < 1000; i++)                /* output 1000 times */
    fputs(Test, stdout);                  /* Output String on the Standard output. */
printf("\n");
}

/*****
**                                     MAIN PROGRAM                                     **
*****/
void main()

{
    printf("\nRAWCOOK (c) 1987 by Michael Tischer\n\n");

    printf("The Console Driver (Keyboard, Display) is now in ");
    printf("RAW Mode.\nDuring the following output control characters,\n");
    printf("such as <CTRL-S> will not be recognized.\n");
    printf("Try it.\n\n");
    printf("Please press a key to start...");
    getch();                               /* wait for key */
    SetRaw(STANDARDIN);                    /* Console driver into RAW mode */
    TestOutput();
    while (kbhit())                        /* in the meantime remove key codes from */
        getch();                          /* keyboard buffer */
    printf("\nThe console driver is now in COOKED mode. ");
    printf("Control keys such as\n<CTRL-S> are recognized during ");
    printf("output and answered accordingly!\n");
    printf("Please press a key to start ...");
    getch();                               /* wait for key */
    SetCooked(STANDARDIN);                 /* Console driver in the COOKED mode */
    TestOutput();

```