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#include <stdio.h>
#include <fcntl.h>
#include <stdlib.h>
#include <string.h>
#include <sys/types.h>
#include <sys/stat.h>
#include <signal.h>

void syserr(char str[])
{
    perror(str);
    exit(1);
} /* sys_arr */

void MySignalHandler(int signal);
void MySignalHandler2(int signal);
int main(int argc, char *argv[])
{
    int x,x2,x3,flags;
    x2 = open("t1.txt",O_RDWR|O_CREAT,S_IWUSR|S_IRUSR|S_IXUSR);
    x3= open("t2.txt",O_RDWR|O_CREAT,S_IWUSR|S_IRUSR|S_IXUSR);
    x = open("descriptor_file",O_RDWR|O_CREAT,S_IWUSR|S_IRUSR|S_IXUSR);
    if (dup2(x, 1) == -1)
        syserr("dup2");

    //printf("x: %d\n",x);
    //if (dup2(x2, 3) == -1)
        // syserr("dup2");
    //printf("x2: %d\n",x2);
    if (dup2(x3, 4) == -1)
        syserr("dup2");
    // printf("x3:
    %d\n",x3);

    if (close(x2) == -1)
        syserr("close");

    signal(SIGUSR1,MySignalHandler2);
    kill(getpid(),SIGUSR1);
    signal(SIGUSR2,MySignalHandler);
    kill(getpid(),SIGUSR2);

    /*flags = fcntl(0, F_GETFD);
    printf("the flag is: %d\n",flags);
    flags = fcntl(3, F_GETFD);
    printf("the flag is: %d\n",flags);
    flags = fcntl(4, F_GETFD);
    printf("the flag is: %d\n",flags);
    */
}

void MySignalHandler(int signal)
{

```

```
int i,flag;
for(i=0;i<5;i++)
{
    flag = fcntl(i, F_GETFD);
    if(flag==1)
        printf("%d false\n",i+1);
}
}

void MySignalHandler2(int signal)
{
    int i,flag;
    for(i=0;i<5;i++)
    {
        flag = fcntl(i, F_GETFD);
        if(flag==0)
        {
            if(i%2==0)
                printf("sigINT true\n");
            else
                printf("sigSEGV true\n");
        }
    }
}
```