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#include <stdio.h>
#include <unistd.h>
#include <linux/sched.h>
#include <sys/resource.h>

/*
 * Scheduling policies defined in sched.h
 */
#define SCHED_NORMAL 0
#define SCHED_FIFO 1
#define SCHED_RR 2
#define SCHED_BATCH 3

struct sched_param {
    int sched_priority;
};

struct sched_param s_param;

void setscheduler(void)
{
    /* call sched_getparam() to initialize s_param struct */

    /* set sched priority to 1 and schedule policy to FIFO */

    printf("Scheduler set to SCHED_FIFO with priority %i...\n", s_param.sched_priority);

    /* check for errors */
    printf("!!!Scheduler set to SCHED_FIFO with priority %i FAILED!!!\n", s_param.sched_priority);
}

int main()
{
    setscheduler();

    while(1)
    {
        printf("PID %i sleeping..\n", getpid());
        switch(sched_getscheduler(getpid()))
        {
            case SCHED_NORMAL: printf("sched_getscheduler() = SCHED_NORMAL\n");
                                break;
            case SCHED_FIFO: printf("sched_getscheduler() = SCHED_FIFO\n");
                              break;
            case SCHED_RR: printf("sched_getscheduler() = SCHED_RR\n");
                            break;
            case SCHED_BATCH: printf("sched_getscheduler() = SCHED_BATCH\n");
                               break;
            default:
                break;
        }

        printf("Process priority %i...\n", getpriority(PRIO_PROCESS, 0));
        sleep(5);
    }
}
```