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/*****
*** Sample program demonstrating the sending of signals ***
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#include <stdio.h>
#include <stdlib.h>
#include <time.h>
#include <unistd.h>
#include <sys/types.h>
#include <sys/wait.h>
#include <signal.h>

/* The signal handler for the child process */
void childSigHandler ( int sig )
{
    if (sig == SIGUSR1) {
        printf("+++ Child : Received signal SIGUSR1 from parent...\n");
        sleep(1);
    } else if (sig == SIGUSR2) {
        printf("+++ Child : Received signal SIGUSR2 from parent...\n");
        sleep(5);
    }
    exit(0);
}

int main ()
{
    int pid;

    pid = fork();
    if (pid) {
        /* Spawn the child process */
        /* Parent process */

        int t;
        srand((unsigned int)time(NULL));
        t = 2 + rand() % 4;
        printf("+++ Parent: Going to sleep for %d seconds\n", t);
        sleep(t); /* Sleep for some time before sending a signal to child */
        t = 1 + rand() % 2;
        printf("+++ Parent: Going to send signal SIGUSR%d to child\n", t);
        kill(pid, (t == 1) ? SIGUSR1 : SIGUSR2); /* Send signal to child */
        wait(NULL); /* Wait for child to exit */
        printf("+++ Parent: Child exited\n");

    } else {
        /* Child process */
        signal(SIGUSR1, childSigHandler); /* Register SIGUSR1 handler */
        signal(SIGUSR2, childSigHandler); /* Register SIGUSR2 handler */
        while (1) sleep(1); /* Sleep until a signal is received from parent */
    }

    exit(0);
}

```