**Unx511/DPS912: Unix Systems Programming**

Quiz 4

Take a look at the code below for recvsig.cpp:

#include <errno.h>

#include <signal.h>

#include <iostream>

#include <string.h>

#include <unistd.h>

using namespace std;

static void sigHandler(int sig);

int main ( ) {

sighandler\_t err1=signal(SIGINT, sigHandler);

sighandler\_t err2=signal(SIGUSR1, sigHandler);

sighandler\_t err3=signal(SIGUSR2, sigHandler);

if(err1==SIG\_ERR || err2==SIG\_ERR || err3==SIG\_ERR) {

cout<<"Cannot create the signal handler"<<endl;

cout<<strerror(errno)<<endl;

return -1;

}

for (int i=0;i<300;++i) {

sleep(1);

}

cout<<"DONE!"<<endl;

return 0;

}

static void sigHandler(int sig)

{

switch(sig) {

case SIGINT:

cout<<"sigHandler: SIGINT I refuse to go down"<<endl;

break;

case SIGUSR1:

cout<<"sigHandler: SIGUSR1 I refuse to go down"<<endl;

break;

case SIGUSR2:

cout<<"sigHandler: SIGUSR2 I refuse to go down"<<endl;

break;

default:

cout<<"sigHandler: Undefined signal"<<endl;

}

}

The following is a table of Linux signals.

|  |  |  |
| --- | --- | --- |
| **Name** | **Signal Number** | **Description** |
| SIGINT | 2 | Terminal interrupt |
| SIGKILL | 9 | Sure kill |
| SIGUSR1 | 10 | User-defined signal 1 |
| SIGUSR2 | 12 | User-defined signal 2 |

Assuming the pid of the program recvsig is 1024, what will be printed on the screen from recvsig if the following commands are issued **in sequence** from a command line: [2 marks each]

**$ kill -2 1024**

**$ kill -10 1024**

**$ kill -12 1024**

**$ kill -9 1024**

**$ kill -2 1024**