Assignment 3

/* You need to put proper explanatory comment in your program to demonstrate the purpose and why you have used the C statements and system calls */

Assignment 3(a):-

Write a C program by using signal() system call to handle the reception of SIGINT signal by executing a particular (user) function, which function is responsible for creating a child process by using fork( ) system call and then you have to display the PROCESS ID and PARENT PROCESS ID from the parent process as well as from the child process.

Hints:

* For generating, SIGINT (SIGINT is a keyboard interrupt signal) signal, you have to press Ctrl+C. So, by default pressing Ctrl+C in a running program leads to the termination of the running process. But, your program should provide a way to handle the keyboard interrupt through signal() system.

Assignment 3(b):-

Write a C program which will take the Process ID and signal ID as input to demonstrate the use of kill( ) system call.

Hints:

* For demonstrating so, you modify the assignment 3(a) to handle different signals as many possible where handler of each signal prints signal number. Run the modified assignment 3(a).
* Again from another terminal, run the assignment 3(b) which will take the Process ID of the modified assignment 3(a) and any valid signal value as input.
* Your signal handler function of the assignment 3(b) should be able to display the signal ID of the generated signal.

Assignment 3(c):-

Write a C program to create a user level thread using system call pthread_create( ) and assign the thread to display the “HELLO WORLD” . Use pthread_exit() in your program (if possible) for terminating the thread.