Programming Tools II LAB

ASSIGNMENT WEEK # 7

1. Write a program to handle different types of SIGNALS using the same handler function. In this program the process will receive different types of signals from system (some other process or by the user itself). The process needs to handle SIGINT, SIGHUP, SIGTERM and for every interrupt the same handler should inform the type of SIGNAL occured. The process need to keep running untill it encouters SIGQUIT.

2. Write a program to define a handler for SIGALRM signal.
In this program you need to set the alarm in main process as defined by the user in seconds. The process then generate SIGALRM signal after 2 seconds. The signal handler needs to identify the SIGALRM. This process needs to iterated for a maximum of 5 times. After setting the alarm for 5 times the program will terminate.

3. Write a program a parent process receives a SIGCHLD signal after termination of child process.
In this program create a child and a parent process. Once the child process terminates, the parent process will recieve a SIGCHLD signal. This signal will invoke a handler which will print the EXIT STATUS of the child process.

4. Extension of Program No. 1
Implement program no. 1 where the signals are generated by the parent process for child process. Once the child process receives signals generated by parent process. It needs to invoke the signal handler as per the signal generated.