

Signal Handling

1. Write a program to deliver the alarm signal periodically after (n-1)sec from the last interrupt.

Hint : Start first alarm at 10 sec then next alarm at 9sec so on up to n=0 terminate .

2. Create a watch dog timer in parent which should watch T.A.T of its child and terminate the child.

Condition: The child have random delay(1-10 sec)

If the child take more than 5 sec then parent terminate it.

Hint : fork(),sleep?(),kill(),alarm().

3. Create a function named “find_isr”, which when calling by passing an interrupt number then it should inform the action of that signal in current program.

Signal action----☐defaulted

☐o/p->Ignore

☐userdefine.

Hint : use signal() function to return value.

4. Write a program to remove the zombie.

Hint : Use SIGCHLD &signal().

5. Write a program to ignore the termination of process when its terminal will close.

Hint : use SIGHUP signal & signal().

6. Write a program to install ISR(handler) for SIGINT and SIGQUIT .
Restore the SIGINT to default after 3 times occurrence.SIGQUIT to default after 5 times occurrence.
7. Write a program to create 3 child process from common parent use random delay between 1 to 10 sec in each child. Use alarm() in parent in such a manner that

Child1 should not exceeds more than 4 sec.

Child2 should not exceeds more than 6 sec.

Child3 should not exceeds more than 8 sec.

8. Write a Program parent has to get the data from user and store the data in file.after that

parent process will send one signal to child process.child process after receiving the

signal,open the file and convert data to oppsite case and store again in same file.

Hint : Use pause() in child process.

Use signal num 10(usersignal) in parent.

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