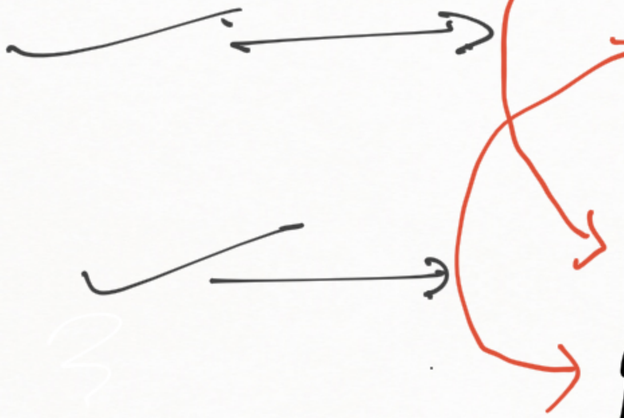
Date: 25-10-21



int sigemptyset (sigset_t *set) ✓

int sigfillset (sigset_t *set)

int sigaddset (sigset_t *set, int signum); ✓

int sigdelset (sigset_t *set, int signum);

✓ sigemptyset (&u.sa_mask)

✓ sigaddset (&u.sa_mask, 3)

⇒ During signal no 2 ISR execution signal 2 not allowed all other signals allowed but except 3

```
void isr (int n)
{
    =
    =
}
```

(2)

```
main()
{
}
```

```
sigaction(2, &u, 0);
while(1);
}
```

sigfillset (&v.sa_mask);

sigdelset (&v.sa_mask, 3);

⇒ If signal no 2 isr is executing during isr execution time signal no 2 not allowed and also all other signals also not allowed but except 3.

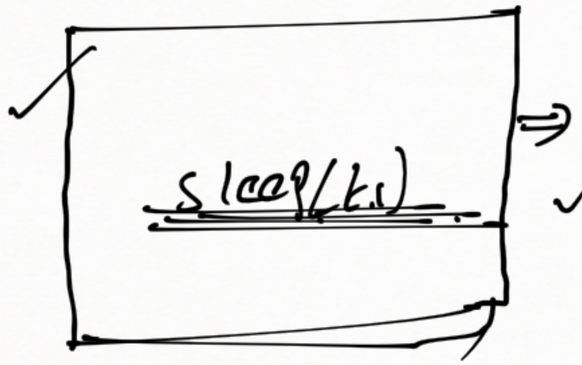
```
void isr(int n)
{
  =
  =
  =
}

main()
{
  =
  =
  =
sigaction(2, &v, 0);
while(1);
```

ASS

Watch dog Timer

Write a program to implimeat watch dog timer by ae parent for child proces, parent proces checks the time of child, if it exceeds 5 seconds then parent forcefully terminates the child and removes from zombiee if child completes with in 5 seconds then no action is Taken by parent.

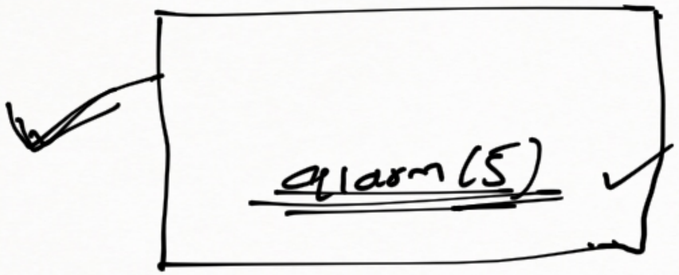
child



⇒ rand & srand (1 TO 10)

ti = 3 / 8

parent



(5 seconds) ⇒ watch dog timer

Resource management

→ Every process during execution time can use resources

Ex: ✓ memory (stack / data / heap)

✓ CPU time.

→ Every process having a limit on resource access.

By default the limit is provided by the O.S

this limit is called soft limit

⇒ we can change the soft limit value.

⇒ soft limit value possible to change upto Hard limit (it is the ceiling value for soft limit)

⇒ as a user we can change soft limit value (Inc/dec) but hard limit we can not Increase but can decrease

⇒ when a child process created, child process Inherits the parent process soft limit value for resource access

⇒ since bash is the parent for process created by default so every process inherits bash limits.

⇒ To display the bash limits use command

```
$ ulimit -a
```

⇒ after process started execution with in the process it is possible to get the resource limit values and also to set the resource limit values.