

## **Operating Systems – OS**

Lab Task 12 (OS-012)



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**Faculty of Computing**

# Tasks

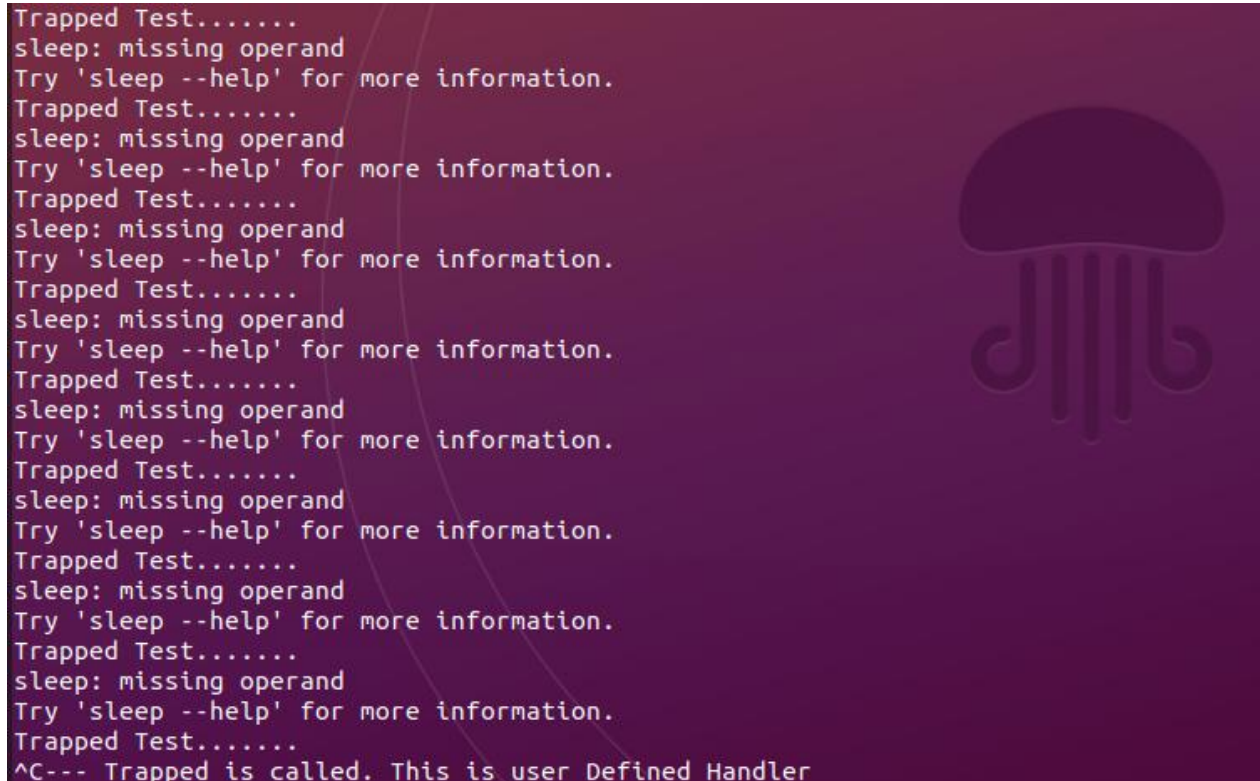
## Solution:

### Task 1:

Put the code in a directory with file having .sh extension and execute.

```
Open  task01.sh
~/lab12

1 #!/bin/sh
2 trap "echo --- Trapped is called. This is user Defined Handler " 2 3
3 for ((i=1; i<=10; i++))
4 do
5     echo Trapped Test.....
6     sleep
7 done
8 trap 2 3
9
```



```
Trapped Test.....
sleep: missing operand
Try 'sleep --help' for more information.
Trapped Test.....
sleep: missing operand
Try 'sleep --help' for more information.
Trapped Test.....
sleep: missing operand
Try 'sleep --help' for more information.
Trapped Test.....
sleep: missing operand
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Trapped Test.....
sleep: missing operand
Try 'sleep --help' for more information.
Trapped Test.....
sleep: missing operand
Try 'sleep --help' for more information.
Trapped Test.....
sleep: missing operand
Try 'sleep --help' for more information.
^C--- Trapped is called. This is user Defined Handler
```

## Task 2:

Copy the following code, execute and see the results.

```
muhammadroshaanidrees56177@Ubuntu:~/lab12$ cd ..
muhammadroshaanidrees56177@Ubuntu:~$ cd lab12
muhammadroshaanidrees56177@Ubuntu:~/lab12$ touch task02.c
muhammadroshaanidrees56177@Ubuntu:~/lab12$ cat<task02.c
#include <signal.h>
#include <stdio.h>
#include <unistd.h>
void catcher (int sigtyp)
{
    printf("--- I GOT THE SIGNAL \n ");
    signal(SIGINT,catcher);
}
int main (void)
{
    int i;
    signal (SIGINT, catcher);
    for (int i=0; i<20; i++)
    {
        printf("WORKING ..... \n");
        sleep(1);
    }
}

muhammadroshaanidrees56177@Ubuntu:~/lab12$ gcc task02.c -o output2
muhammadroshaanidrees56177@Ubuntu:~/lab12$ ./output2
WORKING .....
WORKING .....
WORKING .....
WORKING .....
WORKING .....
WORKING .....
WORKING .....
WORKING .....
WORKING .....
WORKING .....
WORKING .....
WORKING .....
WORKING .....
WORKING .....
WORKING .....
WORKING .....
WORKING .....
WORKING .....
WORKING .....
WORKING .....
muhammadroshaanidrees56177@Ubuntu:~/lab12$
```

```

muhammadrosheanidrees56177@ubuntu:~/lab12$ ./output2
WORKING .....
WORKING .....
--- I GOT THE SIGNAL
WORKING .....
^CWORKING .....
WORKING .....
^C--- I GOT THE SIGNAL
WORKING .....
WORKING .....
WORKING .....
WORKING .....
^C--- I GOT THE SIGNAL
WORKING .....
WORKING .....
WORKING .....
^C--- I GOT THE SIGNAL
WORKING .....
WORKING .....
^C--- I GOT THE SIGNAL
WORKING .....
^C--- I GOT THE SIGNAL
WORKING .....
^C--- I GOT THE SIGNAL
WORKING .....
^C--- I GOT THE SIGNAL
WORKING .....
--- I GOT THE SIGNAL
WORKING .....
^C^C--- I GOT THE SIGNAL
WORKING .....
^C--- I GOT THE SIGNAL
muhammadrosheanidrees56177@Ubuntu:~/lab12$

```

### Task 3:

Put the code in a directory with file having .c extension and execute.

```

Open  [icon] task03.c
~/lab12
1 #include <signal.h>
2 #include <stdio.h>
3 #include <unistd.h>
4 int main (void)
5 {
6     signal (SIGINT, SIG_IGN);
7     while(1)
8         printf("You Can't kill me with SIGINT anymore \n");
9     return 0;
10 }
1

```

