Ex. No.: 4
Date: 12.03.24

SIGNAL CATCHING

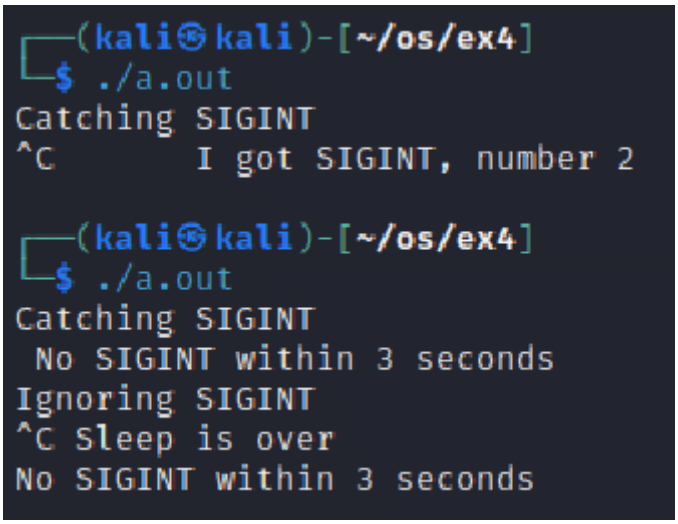
Aim:

To write a C program to catch signals used in Linux.

Program Code:

```
// signals.c
#include <signal.h>
#include <stdio.h>
void my_handler (int sig); /* function prototype */

int main()
{
        struct sigaction my_action;

        /* Part I: Catch SIGINT */
        my_action.sa_handler = my_handler;
        my_action.sa_flags = SA_RESTART;
        sigaction (SIGINT, &my_action, NULL);
        printf ("Catching SIGINT\n");
        sleep (3);
        printf (" No SIGINT within 3 seconds\n");

        /* Part II: Ignore SIGINT */
        my_action.sa_handler = SIG_IGN;
        my_action.sa_flags = SA_RESTART;
        sigaction (SIGINT, &my_action, NULL);
        printf ("Ignoring SIGINT\n");
        sleep (3);
        printf (" Sleep is over\n");


        /* Part III: Default action for SIGINT */
        my_action.sa_handler = SIG_DFL;

        my_action.sa_flags = SA_RESTART;
        sigaction (SIGINT, &my_action,
        NULL);  sleep (3);
        printf ("No SIGINT within 3
seconds\n"); }

void my_handler (int sig)
{
 printf (" \t I got SIGINT, number %d\n",
 sig);  exit(0);
}
```

Output:



Result:
The above program executed successfully and output got verified.