

Using nice and renice for changing priority of any process:

Get and set priority of a process in bash:

starting a new process with user defined priority

```
nice -n -10 firefox
```

changing the priority of running process:

step1:

use pidof to get the priority of firefox

step2:

check the nice value of firefox by using 'top' command
or using **ps -axl**

the NI column shows the niceness of all processes . In current example firefox pid is found to be 4346.

each of us can have different pid value of firefox.

step 3:

use renice for setting new priority of firefox.

Note: to increase the priority of linux process i.e in negative value, you must use sudo.

Priority can be decreased without using sudo.

```
For more details see renice(1).
(base) nausheen@node4:~$ sudo renice -n -12 -p 4346
[sudo] password for nausheen:
4346 (process ID) old priority 0, new priority -12
(base) nausheen@node4:~$ renice -n -13 -p 4346
renice: failed to set priority for 4346 (process ID): Permission denied
(base) nausheen@node4:~$ renice -n -10 -p 4346
4346 (process ID) old priority -12, new priority -10
(base) nausheen@node4:~$
```

Get
and
set

priority of a process in C program:

step1:

man the getpriority() and setpriority() functions for usage.

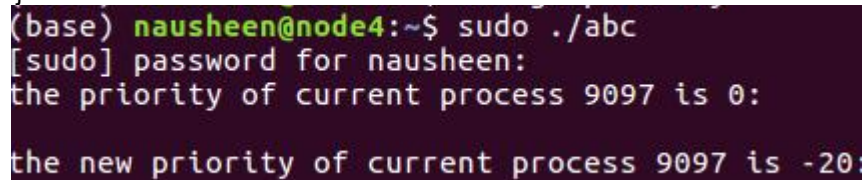
step2:

and change the priority of current process.

Note: run the program using sudo .

```
#include <sys/time.h>
#include <stdio.h>
#include <sys/resource.h>
#include <sys/types.h>
#include <unistd.h>
int main(){
```

```
printf("the priority of current process %d is %d:",getpid(),getpriority(PRIO_PROCESS, 0));  
setpriority(PRIO_PROCESS, 0, -20);  
printf("\n\nthe new priority of current process %d is %d:",getpid(),getpriority(PRIO_PROCESS, 0));  
return 0;  
}
```



A terminal window with a dark purple background. The prompt is (base) nausheen@node4:~\$. The user enters 'sudo ./abc'. The terminal shows the password prompt '[sudo] password for nausheen:' followed by the output 'the priority of current process 9097 is 0:'. The next line shows 'the new priority of current process 9097 is -20:'.

```
(base) nausheen@node4:~$ sudo ./abc  
[sudo] password for nausheen:  
the priority of current process 9097 is 0:  
  
the new priority of current process 9097 is -20:
```