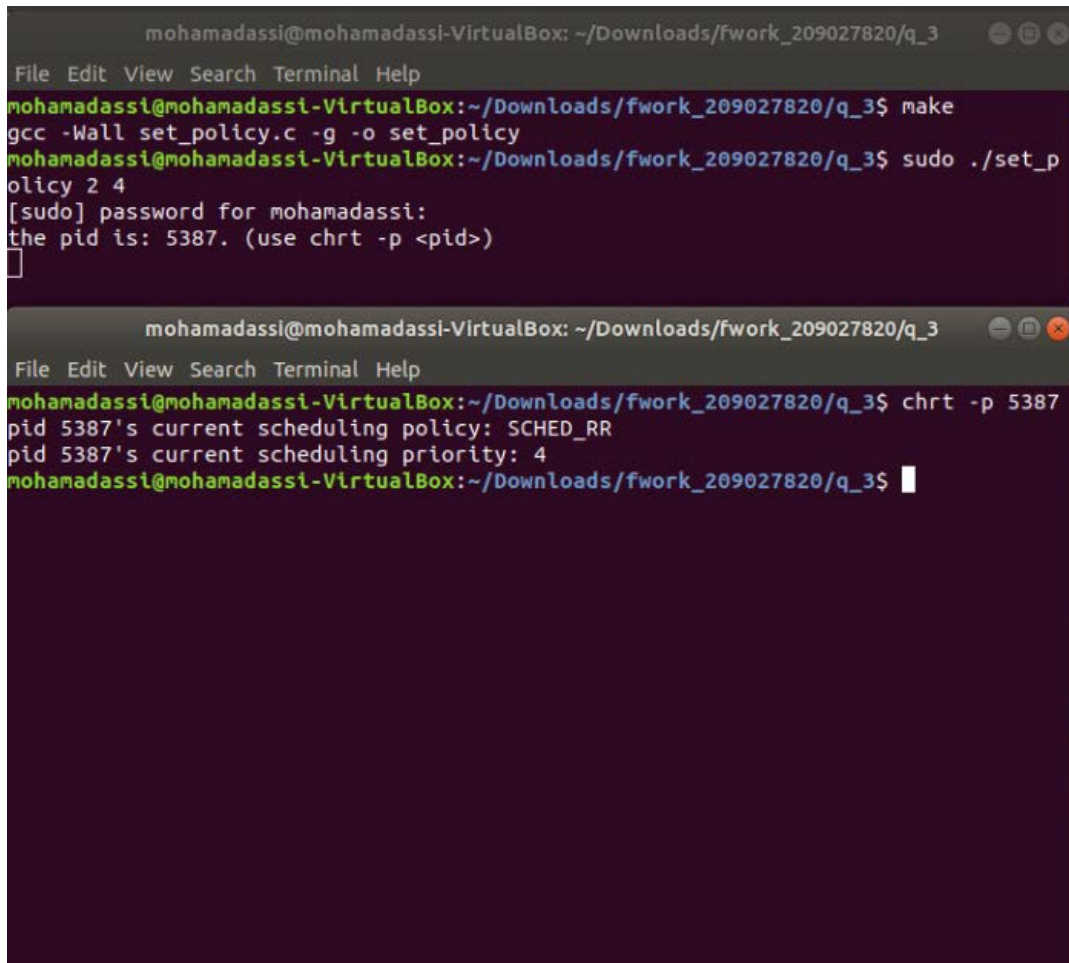


Screenshot:



The image shows two terminal windows from a VirtualBox environment. The top window shows the compilation of a C program named 'set_policy.c' using 'gcc -Wall set_policy.c -g -o set_policy'. It then runs './set_policy 2 4' with 'sudo', which prompts for a password and displays 'the pid is: 5387. (use chrt -p <pid>)'. The bottom window shows the execution of 'chrt -p 5387', which outputs 'pid 5387's current scheduling policy: SCHED_RR' and 'pid 5387's current scheduling priority: 4'.

```
mohamadassi@mohamadassi-VirtualBox: ~/Downloads/fwork_209027820/q_3
File Edit View Search Terminal Help
mohamadassi@mohamadassi-VirtualBox:~/Downloads/fwork_209027820/q_3$ make
gcc -Wall set_policy.c -g -o set_policy
mohamadassi@mohamadassi-VirtualBox:~/Downloads/fwork_209027820/q_3$ sudo ./set_p
olicy 2 4
[sudo] password for mohamadassi:
the pid is: 5387. (use chrt -p <pid>)
█

mohamadassi@mohamadassi-VirtualBox: ~/Downloads/fwork_209027820/q_3
File Edit View Search Terminal Help
mohamadassi@mohamadassi-VirtualBox:~/Downloads/fwork_209027820/q_3$ chrt -p 5387
pid 5387's current scheduling policy: SCHED_RR
pid 5387's current scheduling priority: 4
mohamadassi@mohamadassi-VirtualBox:~/Downloads/fwork_209027820/q_3$ █
```

Explanations:

Chrt*: is known for manipulating the real-time attributes of a process. It sets or retrieves the real-time scheduling attributes of an existing PID, or runs the command with the given attributes.

Renice: alters the scheduling priority of one or more running processes

Taskset: it allows administrators to retrieve and set the processor affinity of a running process, or launch a process with a specified processor affinity.

SCHED_OTHER: Normal schedule sharing. Default Linux time-sharing scheduling.

SCHED_FIFO: First in, first out, real time processes, can be used only with static priorities higher than 0

SCHED_RR: Round robin real time processes.

SCHED_IDLE: Scheduling very low priority jobs

SCHED_DEADLINE: is the name of a patch proposed to add a resource-reservation real-time CPU scheduler to the Linux kernel.