

Question 2.2:

sigaction: examine and change a signal action

sigqueue: queue a signal and data to a process

the difference between RealTime signals and standard signals

More than one RealTime signal can be queued for the process if it has the signal blocked while someone sends it. In standard signals only one of a given type is queued the rest is ignored.

Advantages of RealTime signals:

1. Order of delivery of the signals is guaranteed to be the same as the sending order.
2. Used in multi thread.

Disadvantages of RealTime signals:

1. standard signal is quicker than RealTime signals.
2. many signals in queue lead to delay.

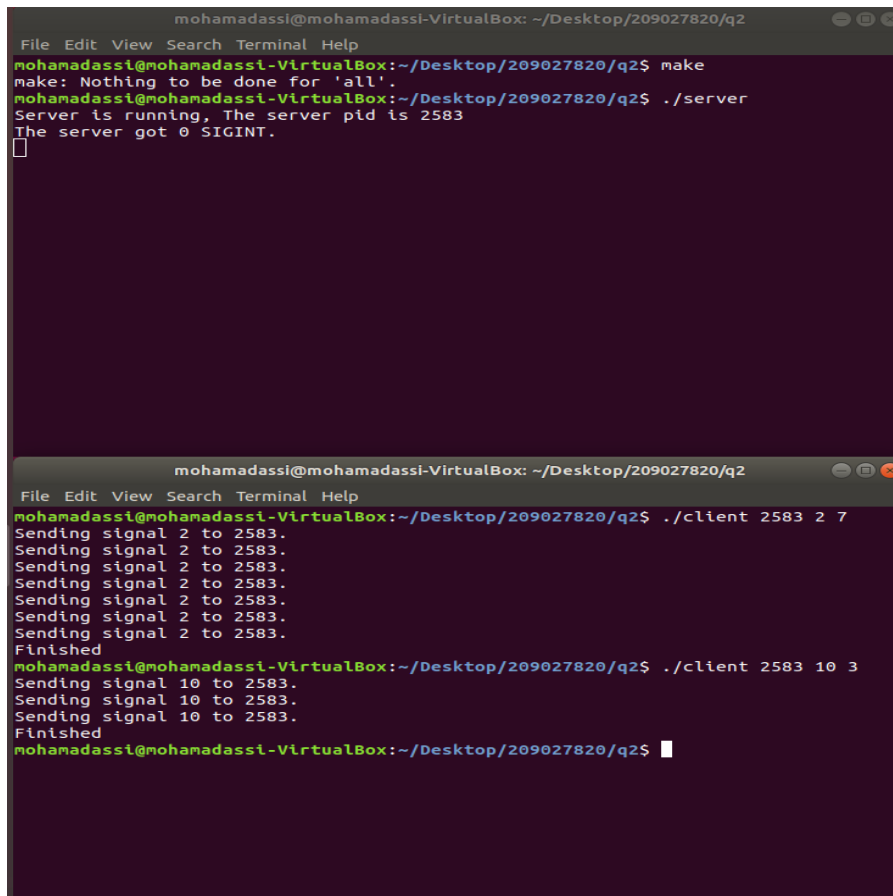
Advantage of standard signals:

1. The interface is convenient.
2. easy to use.

Disadvantages of standard signals:

1. the signal can be received not in order
2. cannot send context with the signals.

Screenshot:



```
mohamadassi@mohamadassi-VirtualBox: ~/Desktop/209027820/q2
File Edit View Search Terminal Help
mohamadassi@mohamadassi-VirtualBox:~/Desktop/209027820/q2$ make
make: Nothing to be done for 'all'.
mohamadassi@mohamadassi-VirtualBox:~/Desktop/209027820/q2$ ./server
Server is running, The server pid is 2583
The server got 0 SIGINT.
█

mohamadassi@mohamadassi-VirtualBox: ~/Desktop/209027820/q2
File Edit View Search Terminal Help
mohamadassi@mohamadassi-VirtualBox:~/Desktop/209027820/q2$ ./client 2583 2 7
Sending signal 2 to 2583.
Sending signal 2 to 2583.
Sending signal 2 to 2583.
Sending signal 2 to 2583.
Sending signal 2 to 2583.
Sending signal 2 to 2583.
Sending signal 2 to 2583.
Sending signal 2 to 2583.
Finished
mohamadassi@mohamadassi-VirtualBox:~/Desktop/209027820/q2$ ./client 2583 10 3
Sending signal 10 to 2583.
Sending signal 10 to 2583.
Sending signal 10 to 2583.
Finished
mohamadassi@mohamadassi-VirtualBox:~/Desktop/209027820/q2$ █
```