

Question 2.2

sigaction:

sigaction() is reliable.

sigaction() can block other signals until the current handler returns.

sigaction() returns 0 on success, else -1 on error.

The problem with sigaction is that it works only on linux.

And its pretty complicated.

Sigqueue:

sigqueue enables passing some more context .

Sigqueue uses real time signals.

Sigqueue is reliable.

Sigqueue must have permission to the process.

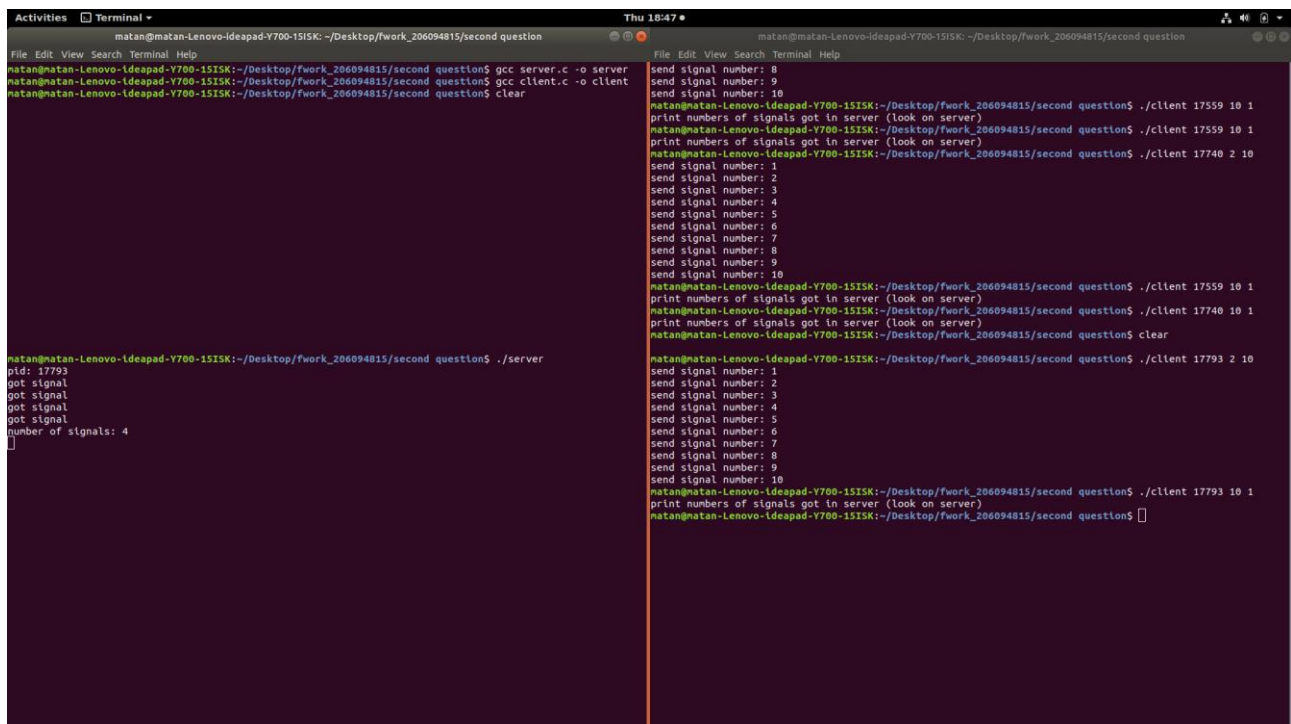
Not all implementations support sigqueue.

Real time signals and regular signals:

Real time signals receive queued signals, and the number of signals sent always corresponds to the number of signals received.

This is not the case when talking about standard signals, it is not promised that the number of signals sent will be the number of signals received (like we show in the program).

Standard signals only one of a given type is queued the rest is ignored, but in real time signals more than one signal can be queued.



```
matan@matan-Lenovo-Ideapad-V700-15ISK: ~/Desktop/fwork_206094815/second question
File Edit View Search Terminal Help
matan@matan-Lenovo-Ideapad-V700-15ISK:~/Desktop/fwork_206094815/second question$ gcc server.c -o server
matan@matan-Lenovo-Ideapad-V700-15ISK:~/Desktop/fwork_206094815/second question$ gcc client.c -o client
matan@matan-Lenovo-Ideapad-V700-15ISK:~/Desktop/fwork_206094815/second question$ clear

matan@matan-Lenovo-Ideapad-V700-15ISK:~/Desktop/fwork_206094815/second question$ ./server
pid: 17793
got signal
got signal
got signal
got signal
number of signals: 4

matan@matan-Lenovo-Ideapad-V700-15ISK:~/Desktop/fwork_206094815/second question$ ./client 17559 10 1
send signal number: 8
send signal number: 9
send signal number: 10
print numbers of signals got in server (look on server)
matan@matan-Lenovo-Ideapad-V700-15ISK:~/Desktop/fwork_206094815/second question$ ./client 17559 10 1
print numbers of signals got in server (look on server)
matan@matan-Lenovo-Ideapad-V700-15ISK:~/Desktop/fwork_206094815/second question$ ./client 17740 2 10
send signal number: 1
send signal number: 2
send signal number: 3
send signal number: 4
send signal number: 5
send signal number: 6
send signal number: 7
send signal number: 8
send signal number: 9
send signal number: 10
matan@matan-Lenovo-Ideapad-V700-15ISK:~/Desktop/fwork_206094815/second question$ ./client 17559 10 1
print numbers of signals got in server (look on server)
matan@matan-Lenovo-Ideapad-V700-15ISK:~/Desktop/fwork_206094815/second question$ ./client 17740 10 1
print numbers of signals got in server (look on server)
matan@matan-Lenovo-Ideapad-V700-15ISK:~/Desktop/fwork_206094815/second question$ clear

matan@matan-Lenovo-Ideapad-V700-15ISK:~/Desktop/fwork_206094815/second question$ ./client 17793 2 10
send signal number: 1
send signal number: 2
send signal number: 3
send signal number: 4
send signal number: 5
send signal number: 6
send signal number: 7
send signal number: 8
send signal number: 9
send signal number: 10
matan@matan-Lenovo-Ideapad-V700-15ISK:~/Desktop/fwork_206094815/second question$ ./client 17793 10 1
print numbers of signals got in server (look on server)
matan@matan-Lenovo-Ideapad-V700-15ISK:~/Desktop/fwork_206094815/second question$
```