server(1)() server(1)()

## **NAME**

server - multi-client server that listens for and executes client transactions on the specified port

## **SYNOPSIS**

server [port]

## DESCRIPTION

server is the consumer of the client-server application that consumes transactions sent by clients.

Messages sent to the server must be in the following format:

```
machinename.pid \ t T<n> \ t
```

Where **machinename** is the name of the client sending the message, **pid** is the process id of the client that acts as a unique identifier, T < n > is the transaction with n being the input to the transaction, and \ t is the delimiter.

The server runs as follows:

- 1. Creates a socket and binds to the port
- 2. Listens for client connections and connects to clients
- 3. Executes client transactions sent to the server
- 4. Returns Done receipt to client along with its transaction id
- 5. Logs all activity into 'server.log'
- 6. Timeouts out after 30 seconds of inactivity

## **NOTES**

This multi-client server does not use threads

If no <port> is provided, then the server falls back to port 8888

#### **EXAMPLES**

./server8000

Start a server that listens on port 8000

# **OPTIONS**

<port> The port number that the server listens to for communications from clients. The port must be in the range 5,000 to 64,000

# **FILES**

```
server.cpp
main.h
tands.cpp
utils.cpp
```

# **DIAGNOSTICS**

The activity performed by this server is logged in the 'server.log' file

server(1)()

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# **CREDITS**

https://www.binarytides.com/server-client-example-c-sockets-linux/

https://www.geeksforgeeks.org/socket-programming-in-cc-handling-multiple-clients-on-server-without-multi-threading/