## OS-hw3

### summary

- author:丁國騰(Kuo Teng, Ding)
- student id:E94036209
- class:資工三乙
- title:hw3

## **Usage:**

makefile:

#### make

open server:

```
./server \[-s server\] \[-p port\] \[-h\]
  -s server: specify the server name or address, default: 127.0.0.1
  -p port: specify the server port, default: 12345
  -h :for print this help message
```

- open client:
  - as same as the usage of the original code assistant gave

```
./client \[-u\] \[-r run\] \[-s server\] \[-p port\] \[-h\]
-u: create request by user input, default: random generation
-r run: how many request to send
-s server: specify the server name or address, default: 127.0.0.1
-p port: specify the server port, default: 12345
-h :for print this help message
```

# description&programming logic:

### server.c:

#### main function:

我使用和助教一樣的getopt函式來擷取指令,並將port和domain預設為12345及127.0.0.1 再以getaddrinfo獲取addrinfo鍊結串列s,並嘗試以其中的資訊打開socket 最後設置socket、bind且listen它

而在main function的最後,以一個while無窮迴圈重複查看是否有新的accept進來,若有則create一 個新的pthread處理

而while迴圈結束後,close剛剛開啟的socket

### server thread:

處理特定accept進來的client,並且以while迴圈以read不斷抓取新的訊息,並write來傳輸回應 每次while循環,將會以memset清除buf和buf len之值