

```
hw@hw-VirtualBox: ~/문서
hw@hw-VirtualBox:~/문서$ ./fifoserver
Server =====
(Server): stop fifo
hw@hw-VirtualBox:~/문서$

hw@hw-VirtualBox: ~/문서
hw@hw-VirtualBox:~/문서$ ./fifoclient
Client =====
Server: stop fifo

server exit...hw@hw-VirtualBox:~/문서$
```

```
hw@hw-VirtualBox: ~/문서
hw@hw-VirtualBox:~/문서$ ./fifoserver
Server =====
(Server): hi
Client exiting...
hw@hw-VirtualBox:~/문서$

hw@hw-VirtualBox: ~/문서
hw@hw-VirtualBox:~/문서$ ./fifoclient
Client =====
Server: hi

(Client): stop fifo
hw@hw-VirtualBox:~/문서$
```

server

GNU nano 7.2 fifoserver.c

```
#include <sys/stat.h>
#include <fcntl.h>
#include <unistd.h>
#include <stdlib.h>
#include <stdio.h>
#include <string.h>

int main() {
    int to_client_fd, to_server_fd;
    char send_buf[100], recv_buf[100];
    const char stop[100] = "stop fifo\n";
    int n;

    printf("Server =====\n");
    // FIFO 파일 생성
    mkfifo("to_client_fifo", 0666);
    mkfifo("to_server_fifo", 0666);

    // FIFO 열기
    to_client_fd = open("to_client_fifo", O_WRONLY);
    to_server_fd = open("to_server_fifo", O_RDONLY);

    if (to_client_fd == -1 || to_server_fd == -1) {
```

GNU nano 7.2 fifoserver.c

```
    printf(" (Server): ");
    fflush(stdout); //표준 출력 버퍼를 비움
    fgets(send_buf, sizeof(send_buf), stdin);
    write(to_client_fd, send_buf, strlen(send_buf));
    // 메시지 받기
    n = read(to_server_fd, recv_buf, sizeof(recv_buf));
    if(strcmp(recv_buf, "stop fifo\n")==0)
    {
        printf("Client exiting...\n");
        break;
    }

    if(strcmp(send_buf, "stop fifo\n") == 0)
        break;

    if (n > 0) {
        recv_buf[n] = '\0';
        printf("Client: %s\n", recv_buf);
    }
}

close(to_client_fd);
```

client

```
#include <fcntl.h>
#include <unistd.h>
#include <stdlib.h>
#include <stdio.h>
#include <string.h>

int main() {
    int to_client_fd, to_server_fd;
    char send_buf[100], recv_buf[100];
    int n;
    printf("Client =====\n");
    // FIFO 열기
    to_client_fd = open("to_client_fifo", O_RDONLY);
    to_server_fd = open("to_server_fifo", O_WRONLY);
    if (to_client_fd == -1 || to_server_fd == -1) {
        perror("open");
        exit(1);
    }
    while (1) {
        // 메시지 받기

        n = read(to_client_fd, recv_buf, sizeof(recv_buf));
        if (n > 0) {
            recv_buf[n] = '\0';
            printf("Server: %s\n", recv_buf);
        }
        if (strcmp(recv_buf, "stop fifo\n") == 0) {
            printf("server exit....");
            break;
        }
        // 메시지 보내기
        printf(" (Client): ");
        fflush(stdout);
        if (fgets(send_buf, sizeof(send_buf), stdin) == NULL)
            break;
        write(to_server_fd, send_buf, strlen(send_buf));
        if (strcmp(send_buf, "stop fifo\n") == 0) {
            break;
        }
    }
}
```