

405410013 張可雋 資工三

[illegible]

```

} else if (strcmp("quit", action) == 0) {
    quit(fd);
} else if (strcmp("name", action) == 0) {
    FILE *ptr;
    int i, count, reset = 1;
    char number[Max];
    data();
    for (i = 0; i < SIZE; i++) {
        if (i % 10 == 0) {
            if (strcmp(NAME[i], copied) == 0) reset = 1;
        }
        if (reset) {
            sleep(1);
            SendMsgToOne("terminate", fd);
        } else {
            // SendMsgToOne("DC", fd);
            ptr = fopen("name.txt", "w");
            if (reset) {
                NAME[i] = copied; used[i] = 1;
            }
            for (i = 0; i < SIZE; i++) {
                if (i % 10 == 0) {
                    for (count = NAME[i][count] - '\0'; count++;
                        fwrite(NAME[i], 1, count, ptr);
                        sprintf(number, "%04d", i);
                        for (count = number[count] - '\0'; count++;
                            fwrite(number, 1, count, ptr);
                        }
                }
            }
            fclose(ptr);
            printf("fd = %d , name = %s\n", fd, NAME[i]);
        } else if (strcmp("list", action) == 0) {
            char buf[Max];
            data();
            SendMsgToOne("ls 查看目录", fd);
            for (int i = 0; i < SIZE; i++) {
                if (i % 10 == 0) {
                    sprintf(buf, " --- 名称 : %s ( fd = %d ) ---\n", NAME[i], i);
                    // printf("%s\n", buf);
                    SendMsgToOne(buf, fd);
                }
            }
            SendMsgToOne(" < end > ", fd);
        } else if (strcmp("send", action) == 0) {
            wflag = 1;
            if (-1 == (fdw = open(copied, O_WRONLY | O_CREAT | O_TRUNC, 0666))) {
                perror("open file fail");
                printf("fdw = %d , copied = %s\n", fdw, copied);
            }
            FILE *ptr;
            ptr = fopen("file.txt", "a");
            fwrite(copied, 1, strlen(copied), ptr);
            fclose(ptr);
            strcpy(transfile, copied);
        } else if (strcmp("end", action) == 0) {
            wflag = 0;
            printf("get %s success\n", copied);
            close(fdw);
        } else if (strcmp("write", action) == 0 || wflag == 1) {
            int nrd = 0;
            // for (i = copied[i] - '\0'; i++; nrd++) {
            printf("buf = %s\n", buf);
            printf("nrd = %d\n", nrd);
            if ( (nrd = write(fdw, buf, nrd)) < 0 ) {
                perror("write fail");
            }
        } else if (strcmp("check", action) == 0) {
            char msg[Max] = {};
            char msg2[Max] = {};
            int no = 1;
            data();
            printf("person = %s , action = check\n", person);
            sprintf(msg, " %s 是否 删除成功, 请问是否要下载 <是> ? (yes / no)", NAME[i], transfile);
            for (i = 0; i < SIZE; i++) {
                if (i % 10 == 0) {
                    if (strcmp(NAME[i], person) == 0) no = 1;
                }
            }
            if (no == 1) {
                SendMsgToOne(" <失败> 指定的人不在聊天室", fd);
                continue;
            }
            char number[SIZE] = {};
            sprintf(number, "%04d", no);
            FILE *ptr;
            ptr = fopen("file.txt", "a");
            fwrite(number, 1, strlen(number), ptr);
            fclose(ptr);
            sprintf(msg2, "file %s", transfile);
            SendMsgToOne(msg2, no);
            sleep(1);
            sprintf(msg2, "download");
            SendMsgToOne(msg2, no);
            sleep(1);
            SendMsgToOne(msg, no);
            SendMsgToOne(" <成功> 已经删除成功", fd);
        } else if (strcmp("get", action) == 0) {
            // file;
            int fdw;
            int nrd = 0, num = -1, i;
            char buff[MAXIMUM];
            if (i % 10 == 0) {
                if (strcmp("permt") {
                    strcpy(buff, "permt");
                    send(fd, buff, strlen(buff), 0);
                    continue;
                }
                if (strcmp(FILELIST[i], buff) == 0) {
                    strcpy(buff, "notexist");
                    send(fd, buff, strlen(buff), 0);
                    continue;
                }
            }
            printf("copied = %s , num = %d\n", copied, num);
            if (-1 == (access(copied, F_OK))) {
                printf("copied is not exist\n", copied);
                SendMsgToOne("fail", fd);
                continue;
            }
            if (-1 == (fdw = open(copied, O_RDONLY))) {
                perror("open fail");
                printf("fdw = %d\n", fdw);
                while (1) {
                    nrd = read(fdw, buff, sizeof(buff));
                    if (nrd > 0) {
                        printf("buff = %s\n", buff);
                        send(fd, buff, nrd, 0);
                        usleep(1);
                    }
                    printf("send %s over\n", copied);
                    close(fdw);
                    sleep(1);
                    send(fd, "sender", sizeof("sender"), 0);
                }
            }
        }
    }
}

void service() {
    printf("in-----服务线程-----\n\n");
    while (1) {
        struct sockaddr_in fromaddr;
        socklen_t len = sizeof fromaddr;
        int fd = accept(sockfd, (SA *)&fromaddr, &len);
        if (fd == -1) {
            printf("fail to accept client...\n");
            continue;
        }
        int i = 0;
        for (i = 0; i < size; i++) {
            if (fd[i] == 0) {
                // record client's sock
                fd[i] = fd;
                printf("fd = %d\n", fd);
                // client connected, use thread
                pthread_t tid;
                pthread_create(&tid, 0, service_thread, fd);
                break;
            }
        }
        if (size == i) {
            // chatroom full
            char str = " <失败> 聊天室已满";
            send(fd, str, strlen(str), 0);
            close(fd);
        }
    }
}

int main() {
    FILE *ptr;
    ptr = fopen("name.txt", "w");
    fclose(ptr);
    ptr = fopen("file.txt", "w");
    fclose(ptr);
    init();
    service();
}

```

client.c

[illegible]