

实验代码：

```
#include <stdio.h>
#include <stdlib.h>
#include<sys/wait.h>
#include <sys/types.h>
#include <sys/msg.h>
#include <sys/ipc.h>
#include<unistd.h>

#define MSGKEY 75

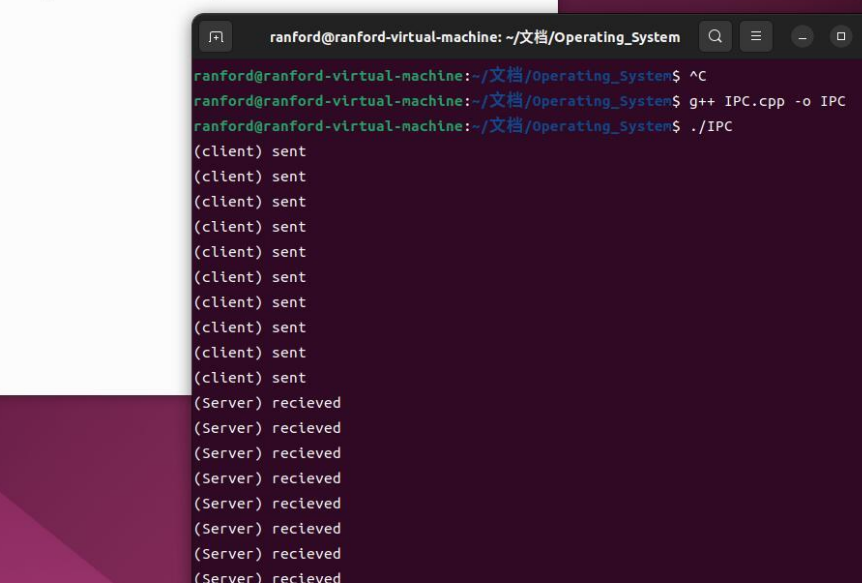
struct msgform
{
    long mtype;
    char mtext[1030];
}msg;
int msgqid,i;
void CLIENT()
{
    int i;
    msgqid=msgget(MSGKEY,0777);
    for (i=10;i>=1;i--)
    {
        msg.mtype=i;
        printf("(client) sent \n");
        msgsnd(msgqid,&msg,1024,0);
    }
    exit(0);
}
void SERVER()
{
    msgqid=msgget(MSGKEY,0777|IPC_CREAT);
    do{
        msgrcv(msgqid,&msg,1030,0,0);
        printf("(Server) recieved\n");
    } while(msg.mtype!=1);
    msgctl(msgqid,IPC_RMID,0);
    exit(0);
}
int main()
{
    while((i=fork())!=-1);
    if(!i) SERVER();
    while((i=fork())!=-1);
    if(!i) CLIENT();
}
```

```

    return 0;
}

```

实验结果:



```
ranford@ranford-virtual-machine: ~/文档/Operating_System
ranford@ranford-virtual-machine:~/文档/Operating_System$ g++ IPC.cpp -o IPC
ranford@ranford-virtual-machine:~/文档/Operating_System$ ./IPC
(client) sent
(client) sent
(client) sent
(client) sent
(client) sent
(client) sent
(client) sent
(client) sent
(client) sent
(client) sent
(Server) recieved
(Server) recieved
(Server) recieved
(Server) recieved
(Server) recieved
(Server) recieved
(Server) recieved
(Server) recieved
(Server) recieved
(Server) recieved
ranford@ranford-virtual-machine:~/文档/Operating_System$
```