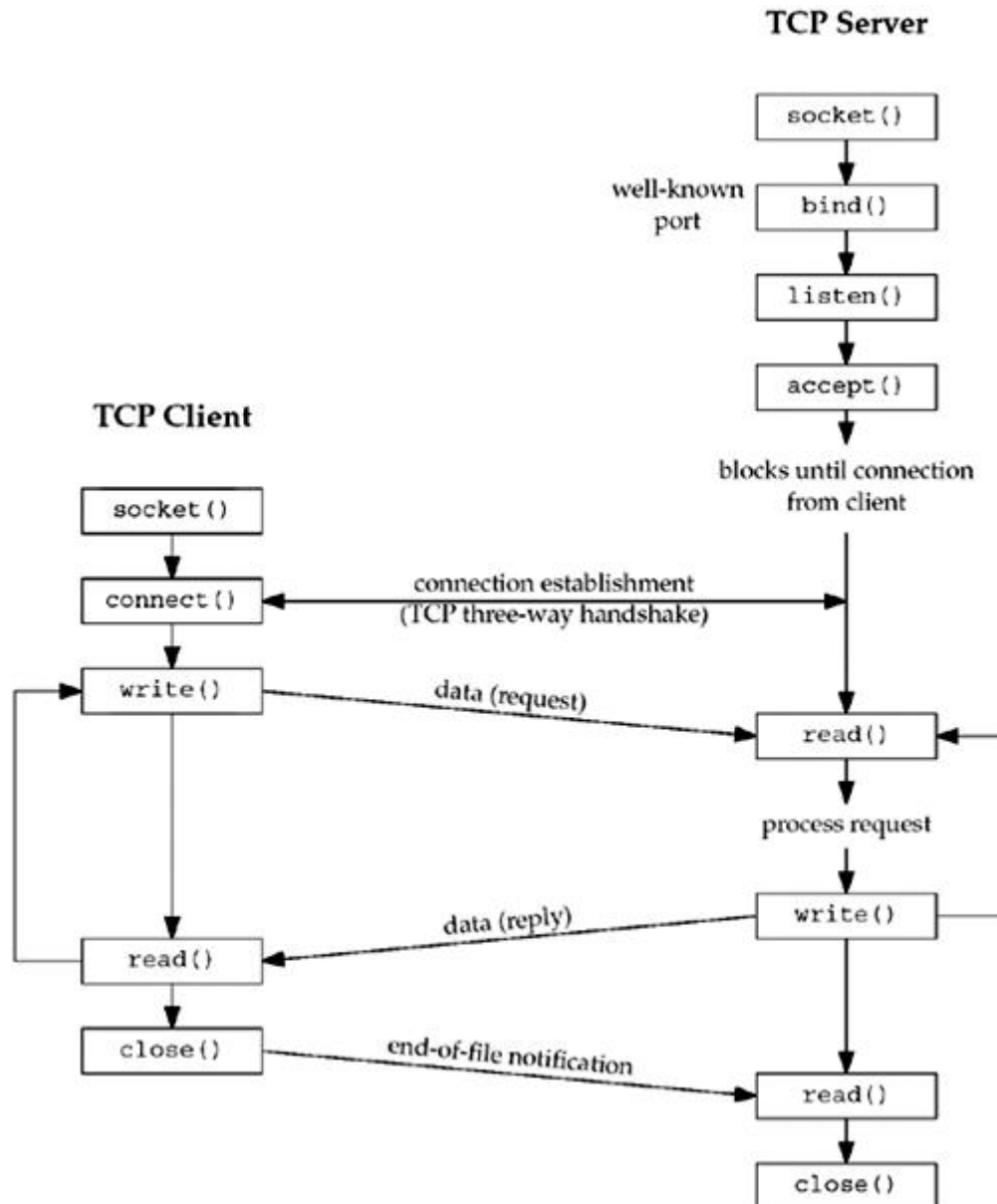


Client/Server programming using TCP



1. Client machine's program

```
/*TCP_Client*/  
  
#include <sys/types.h>  
  
#include <sys/socket.h>  
  
#include <netinet/in.h>  
  
#include <stdio.h>  
  
#include <unistd.h>  
  
#include <stdlib.h>  
  
int main()  
{ int sid;  
  
char c;  
  
struct sockaddr_in server_address;  
  
int server_addlen;  
  
server_address.sin_family=AF_INET;  
  
server_address.sin_addr.s_addr=inet_addr("127.0.0.1");  
  
server_address.sin_port=5080;  
  
server_addlen=sizeof(server_address);  
  
sid=socket(AF_INET,SOCK_STREAM,0);  
  
connect(sid,(struct sockaddr *)&server_address,server_addlen);  
  
write(sid,"B",1);  
  
read(sid,&c,1);  
  
printf("Char from server is %c\n",c);  
  
close(sid);  
  
return(0);  
  
}
```

2. Server machines' program

```
/*TCP_Server*/

#include <sys/types.h>

#include <sys/socket.h>

#include <netinet/in.h>

#include <stdio.h>

#include <unistd.h>

#include <stdlib.h>

int main()

{

int serid, sessid;

char c;

struct sockaddr_in server_address, client_address;

int server_addlen, client_addlen;

server_address.sin_family=AF_INET;

server_address.sin_addr.s_addr=inet_addr("127.0.0.1");

server_address.sin_port=5080;

server_addlen=sizeof(server_address);

client_addlen=sizeof(client_address);

serid=socket(AF_INET, SOCK_STREAM, 0);

bind(serid, (struct sockaddr*)&server_address, server_addlen);

listen(serid, 10);

while(1)

{

printf("Server is ready to accept ..... \n");
```

```
sessid=accept(serid,(struct sockaddr *)&client_address,&client_addlen);  
read(sessid,&c,1);  
write(sessid,&c,1);  
close(sessid);  
}  
return(0);  
}
```