//UDP Client application to reverse the given input sentence

//client program

#include <stdio.h>

#include <stdlib.h>

#include <errno.h>

#include <string.h>

#include <sys/types.h>

#include <sys/socket.h>

#include <netinet/in.h>

#include <arpa/inet.h>

#include <fcntl.h>

#include <signal.h>

#include <unistd.h>

#define BUFSIZE 512

static void sig\_usr(int);

void str\_cli(FILE \*fp , int sockfd , struct sockaddr \*server , socklen\_t len);

int main( int C, char \*argv[] )

{

int sd;struct sockaddr\_in serveraddress;

signal(SIGPIPE,sig\_usr);

signal(SIGINT,sig\_usr);

if (NULL==argv[1])

{

printf("Please enter the IP Address of the server\n");

exit(0);

}

if (NULL==argv[2])

{

printf("Please enter the Port Number of the server\n");

exit(0);

}

sd = socket( AF\_INET, SOCK\_DGRAM, 0 );

if( sd < 0 )

{

perror( "socket error" );

exit( 1 );

}

memset( &serveraddress, 0, sizeof(serveraddress) );

serveraddress.sin\_family = AF\_INET;

serveraddress.sin\_port = htons(atoi(argv[2]));

serveraddress.sin\_addr.s\_addr = inet\_addr(argv[1]);

printf("\n Client Starting service\n");

printf("\n Enter Data For the server\n");

str\_cli(stdin,sd ,(struct sockaddr \*)&serveraddress,sizeof(serveraddress));}

static void sig\_usr(int signo)

{

char \*strpipe="RECEIVED SIGPIPE - ERROR";

char \*strctrl="RECEIVED CTRL-C FROM YOU";

if(signo==SIGPIPE)

{

write(1,strpipe,strlen(strpipe));

exit(1);

}

else if(signo==SIGINT)

{

write(1,strctrl,strlen(strctrl));

exit(1);

}

}

void str\_cli(FILE \*fp, int sockfd ,struct sockaddr \*to ,socklen\_t length)

{

int maxdes,n;

fd\_set rset;char sendbuf[BUFSIZE] , recvbuf[BUFSIZE] ,servername[100];

struct sockaddr\_in serveraddr;

socklen\_t slen;FD\_ZERO(&rset);

maxdes=(sockfd>fileno(fp)?sockfd+1:fileno(fp)+1);

for(;;)

{

FD\_SET(fileno(fp) , &rset);

FD\_SET(sockfd , &rset);

select(maxdes,&rset,NULL,NULL,NULL);

if(FD\_ISSET(sockfd , & rset))

{

slen=sizeof(serveraddr);

n=recvfrom(sockfd,recvbuf,BUFSIZE,0,(struct sockaddr\*)&serveraddr,&slen);

printf("\nData Received from server %s:\n",inet\_ntop(AF\_INET,&serveraddr.sin\_addr,servername,sizeof(servername)));

write(1,recvbuf,n);

printf("\n Enter Data For the server\n");

}

if(FD\_ISSET(fileno(fp) , & rset))

{

fgets(sendbuf,BUFSIZE,fp);n = strlen (sendbuf); /\*Sending the read data over socket\*/

sendto(sockfd,sendbuf,n,0,to,length);

printf("\n Data Sent To Server\n");

}

}

}