/\* --- Project 10 ---

--- Remote Calcy Project ---

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--- Client code for remote calcutor on unix command line interface ---

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#include<stdio.h>

#include<netinet/in.h>

#include<sys/types.h>

#include<sys/socket.h>

#include<netdb.h>

#include<string.h>

#include<stdlib.h>

#define MAX 80

#define PORT 43454

#define SA struct sockaddr

void error(char \*msg)

{

perror(msg);

exit(1);

}

void calcy(int sockfd)

{

char buff[MAX];

int n;

for(;;)

{

bzero(buff,sizeof(buff));

printf("\nEnter the Expression: ");

n=0;

while((buff[n++]=getchar())!='\n');

write(sockfd,buff,sizeof(buff)); //client is going to write the expression on socket

bzero(buff,sizeof(buff));//clearing the buffer

read(sockfd,buff,sizeof(buff));//reading the result fom socket

printf("Result: %s",buff);

if((strncmp(buff,"exit",4))==0)

{

printf("Client Exit...\n");

break;

}

}

}

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

{

int sockfd,connfd,portno;

struct sockaddr\_in servaddr,cli;

sockfd=socket(AF\_INET,SOCK\_STREAM,0); //creating socket

portno=atoi(argv[1]);

if(argc<3){

fprintf(stderr,"Error please provide both port number and ip address");

exit(1);

}

if(sockfd==-1)

{

printf("socket creation failed...\n");

exit(0);

}

else

printf("Socket successfully created..\n");

bzero(&servaddr,sizeof(servaddr));

servaddr.sin\_family=AF\_INET;//socket belongs to internet

servaddr.sin\_addr.s\_addr=htonl(INADDR\_ANY);

servaddr.sin\_port=htons(portno);//converting port number to network address

if(connect(sockfd,(SA \*)&servaddr,sizeof(servaddr))!=0)//connecting to the server

{

printf("connection with the server failed...\n");

exit(0);

}

else

printf("connected to the server..\n");

calcy(sockfd);//calling calcy function

close(sockfd);//closing socket

}