

SERVER SIDE

```
//Program for SMTP_Server
#include<stdio.h>
#include<stdlib.h>
#include<sys/types.h>
#include<netinet/in.h>
#include<string.h>
#include<unistd.h>
int main()
{
    struct sockaddr_in server,client;
    int sock_desc,temp_sock_desc,pno,i=0,j,m=0;
    socklen_t len;
    char buf[100],domain[20],snd[26];
    memset(&server,0,sizeof(server));
    memset(&client,0,sizeof(client));
    printf("\n Enter the port number : ");
    scanf("%d",&pno);
    if((sock_desc=socket(AF_INET,SOCK_DGRAM,0))==-1)
    {
        printf("\n Socket creation failed !!!\n");
        exit(1);
    }
    server.sin_family=AF_INET;
    server.sin_port=pno;
    server.sin_addr.s_addr=INADDR_ANY;
    if((bind(sock_desc,(struct sockaddr *)&server,sizeof(server)))== -1)
    {
        printf("\n Binding error !!!\n");
        exit(1);
    }
    len=sizeof(server);
    if((recvfrom(sock_desc,buf,sizeof(buf),0,(struct sockaddr *)&server,&len))==-1)
    {
        printf("\n Error in receiving !!!\n");
        exit(1);
    }
    strcpy(snd,buf);
    while(i<strlen(buf))
    {
        if(buf[i]=='0')
        {
            for (j=i+1;strlen(buf);j++)
                domain[m++]=buf[j];
            break;
        }
        i++;
    }
    domain[m]='\0';
    printf("\n Reveiving mail ...");
    printf("\n Domain verified <<%s>> ...\n",domain);
}
```

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len=sizeof(server);
if((recvfrom(sock_desc,buf,sizeof(buf),0,(struct sockaddr *)&server,&len))==-1)
{
    printf("\n Error in receiving !!!\n");
    exit(1);
}
printf("\n From : %s\n",buf);
len=sizeof(server);
if((recvfrom(sock_desc,buf,sizeof(buf),0,(struct sockaddr *)&server,&len))==-1)
{
    printf("\n Error in receiving !!!\n");
    exit(1);
}
while(strcmp(buf,".")!=0)
{
    printf("%s\t\n\t",buf);
    len=sizeof(server);
    if((recvfrom(sock_desc,buf,sizeof(buf),0,(struct sockaddr *)&server,&len))==-1)
    {
        printf("\nError in receiving..\n");
        exit(1);
    }
}
printf("\n Mail received to: %s \n",snd);
close(temp_sock_desc);
return(0);
}
//End of the program

```

CLIENT SIDE

```

//Program for SMTP_Client
#include<stdio.h>
#include<sys/socket.h>
#include<netinet/in.h>
#include<stdlib.h>
#include<string.h>
#include<arpa/inet.h>
#include<unistd.h>
int main()
{
    struct sockaddr_in client;
    int sock_desc,pno;
    char buf[100];
    memset(&client,0,sizeof(client));
    printf("\n Enter the port number : ");
    scanf("%d",&pno);
    if((sock_desc=(socket(AF_INET,SOCK_DGRAM,0)))== -1)
    {
        printf("\n Socket creation failed !!!\n");
        exit(1);
    }
}

```

```

client.sin_family=AF_INET;
client.sin_port=pno;
client.sin_addr.s_addr=inet_addr("127.0.0.1");
printf("\n To   : ");
scanf("%s",buf);
if((sendto(sock_desc,buf,sizeof(buf),0,(struct sockaddr *)&client,sizeof(client)))== -1)
{
    printf("\nSending error !!!\n");
    exit(1);
}
strcpy(buf,"\0");
printf("\n From   : ");
scanf("%s",buf);
if((sendto(sock_desc,buf,sizeof(buf),0,(struct sockaddr *)&client,sizeof(client)))== -1)
{
    printf("\n Error in sending !!!\n");
    exit(1);
}
strcpy(buf,"\0");
printf("\n Subject : ");
scanf("%s",buf);
if((sendto(sock_desc,buf,sizeof(buf),0,(struct sockaddr *)&client,sizeof(client)))== -1)
{
    printf("\n Error in sending !!!\n");
    exit(1);
}
strcpy(buf,"\0");
printf("\n Message body : ");
while(strcmp(buf,".")!=0)
{
    strcpy(buf,"\0");
    scanf("%s",buf);
    if((sendto(sock_desc,buf,sizeof(buf),0,(struct sockaddr *)&client,sizeof(client)))== -
1)
    {
        printf("\n Error in sending !!!\n");
        exit(1);
    }
}
close(sock_desc);
return 0;
}
//End of the program

```

OUTPUT

```
user@hp: ~/Documents
File Edit View Search Terminal Help
user@hp:~/Documents$ gcc smtpserver.c
user@hp:~/Documents$ ./a.out

Enter the port number : 2053
Reveiving mail ...
Domain verified <<>> ...
From : user2@gmail.com
hai
hello
Mail received to: user1@gmail.com
user@hp:~/Documents$
```

```
user@hp: ~/Documents
File Edit View Search Terminal Help
user@hp:~/Documents$ gcc smtpclient.c
user@hp:~/Documents$ ./a.out

Enter the port number : 2053

To      : user1@gmail.com

From    : user2@gmail.com

Subject : hai

Message body : hello
user@hp:~/Documents$
```