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//B20CS1130
//Experiment 15
//TCP Sal Server
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#include<stdio.h>
#include<stdlib.h>
#include<string.h>
#include<netinet/in.h>
#include<sys/socket.h>
#include<sys/types.h>
#include<unistd.h>
```

```
void main(){
    printf("Server side\n");
    char buffer[50];
    int sockfd,newsocket;
    struct sockaddr_in addr1,addr2;

    addr1.sin_family=AF_INET;
    addr1.sin_addr.s_addr=INADDR_ANY;
    addr1.sin_port=3008;
    int s=sizeof(struct sockaddr_in);
    sockfd=socket(AF_INET,SOCK_STREAM,0);

    bind(sockfd,(struct sockaddr*)&addr1,sizeof(addr1));

    listen(sockfd,5);

    newsocket=accept(sockfd,(struct sockaddr*)&addr2,(&s));
    int base,hra,da,pt,epf,total;

    do{
        printf("Connection established\n");
        printf("Receiving message from client\n");
        recv(newsocket,buffer,sizeof(buffer),0);
        base=atoi(buffer);
        printf("Base Salary: %d\n",base);
        recv(newsocket,buffer,sizeof(buffer),0);
        hra=atoi(buffer);
        printf("HRA: %d\n",hra);
        recv(newsocket,buffer,sizeof(buffer),0);
        da=atoi(buffer);
        printf("DA: %d\n",da);
        recv(newsocket,buffer,sizeof(buffer),0);
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        pt=atoi(buffer);
        printf("PT: %d\n",pt);
        recv(newsocket,buffer,sizeof(buffer),0);
        epf=atoi(buffer);
        printf("EPF: %d\n",epf);
        total=base+hra+da-pt-epf;

        sprintf(buffer,"%d",total);
        send(newsocket,buffer,sizeof(buffer),0);
    }while(strcmp(buffer,"stop")!=0);
    close(newsocket);
    close(sockfd);
}
//TCP Sal Client

#include<stdio.h>
#include<stdlib.h>
#include<string.h>
#include<netinet/in.h>
#include<sys/socket.h>
#include<sys/types.h>
#include<unistd.h>

void main(){
    printf("Client Side\n");
    char buffer[50];
    int sockfd;

    sockfd=socket(AF_INET,SOCK_STREAM,0);
    struct sockaddr_in addr1,addr2;

    addr2.sin_family=AF_INET;
    addr2.sin_addr.s_addr=INADDR_ANY;
    addr2.sin_port=3008;

    connect(sockfd,(struct sockaddr*)&addr2,sizeof(addr2));

    do{
        printf("Enter basic salary: ");
        scanf("%s",buffer);
        send(sockfd,buffer,sizeof(buffer),0);
        printf("Enter HRA: ");
        scanf("%s",buffer);
        send(sockfd,buffer,sizeof(buffer),0);
    }

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        printf("Enter DA: ");
        scanf("%s",buffer);
        send(sockfd,buffer,sizeof(buffer),0);
        printf("Enter PT: ");
        scanf("%s",buffer);
        send(sockfd,buffer,sizeof(buffer),0);
        printf("Enter EPF: ");
        scanf("%s",buffer);
        send(sockfd,buffer,sizeof(buffer),0);

        recv(sockfd,buffer,sizeof(buffer),0);
        printf("Total Salary: %s\n",buffer);
    }while(strcmp(buffer,"stop")!=0);
    close(sockfd);
}
/*

```

OUTPUT

s6cs130@comp62:~\$ gcc server.c

s6cs130@comp62:~\$./a.out

Server side

Connection established

Receiving message from client

Base Salary: 45000

HRA: 4500

DA: 3000

PT: 450

EPF: 69

s6cs130@comp62:~\$ gcc client.c

s6cs130@comp62:~\$./a.out

Client Side

Enter basic salary: 45000

Enter HRA: 4500

Enter DA: 3000

Enter PT: 450

Enter EPF: 69

Total Salary: 51981

Enter basic salary: ^C

*/