

Prog 7

server.c

```

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

int main() {
    int sd, addr, len, bytes, port;
    char send[50], receive[50];
    struct sockaddr_in serv, cli;
    if ((sd = socket(AF_INET, SOCK_STREAM, 0)) < 0) {
        fprintf(stderr, "Error in socket\n");
        exit(0);
    }

    bzero(&serv, sizeof(serv));
    serv.sin_family = AF_INET;
    serv.sin_port = htons(8000);
    serv.sin_addr.s_addr = htonl(INADDR_ANY);
    if (bind(sd, (struct sockaddr *)&serv, sizeof(serv)) < 0) {
        fprintf(stderr, "Error in Bind\n");
        exit(0);
    }
}

```



```

if (listen(sd, 3) < 0) {
    printf("Error in listen");
    exit(0);
}

if (accept(sd, (struct sockaddr *)&NULL, NULL) < 0) {
    printf("Error in accept");
    exit(0);
}

while (1) {
    bytes = recv(buf, receive, 50, 0);
    receive[bytes] = '\0';
    if (strcmp(receive, "end") == 0) {
        close(buf);
        close(fd);
        exit(0);
    }

    else {
        printf("Command received: %s", receive);
        system(receive);
        printf("\n");
    }
}
}
}

```


client.c

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

```
int main() {
```

```
    int sd, addrlen, len, bytes, port;
```

```
    char send[50], recv[50];
```

```
    struct sockaddr_in serv, cli;
```

```
    if ((sd = socket(AF_INET, SOCK_STREAM, 0)) < 0) {
```

```
        printf("Error in socket\n");
```

```
        exit(0);
```

```
    }
```

```
    bzero(&serv, sizeof(serv));
```

```
    serv.sin_family = AF_INET;
```

```
    serv.sin_port = htons(8080);
```

```
    serv.sin_addr.s_addr = htonl(INADDR_ANY);
```

```
    if (connect(sd, (struct sockaddr *)&serv, sizeof(serv)) < 0) {
```

```
        printf("Error in connection\n");
```

```
        exit(0);
```

```
    }
```



```
while(1){
```

```
    printf("Enter the command: ");
```

```
    gets(send);
```

```
    if (strcmp(send, "end") != 0) {
```

```
        send(send, send, 50, 0);
```

```
        close(sockfd);
```

```
        break;
```

```
    }
```

```
}
```

```
}
```

Marks - Part A - Programs

Prog 1: $6 + 4 = 10$

Prog 2: $6 + 4 = 10$

Prog 3: $6 + 4 = 10$

Prog 4: $6 + 4 = 10$

Prog 5: $6 + 4 = 10$

Prog 6: $6 + 4 = 10$

Prog 7: $6 + 4 = 10$

Prog 8: $6 + 4 = 10$

Total: 80/80 Returned to 30/30

Part B - 9/10

Internal: 10/10

Total: 49/50