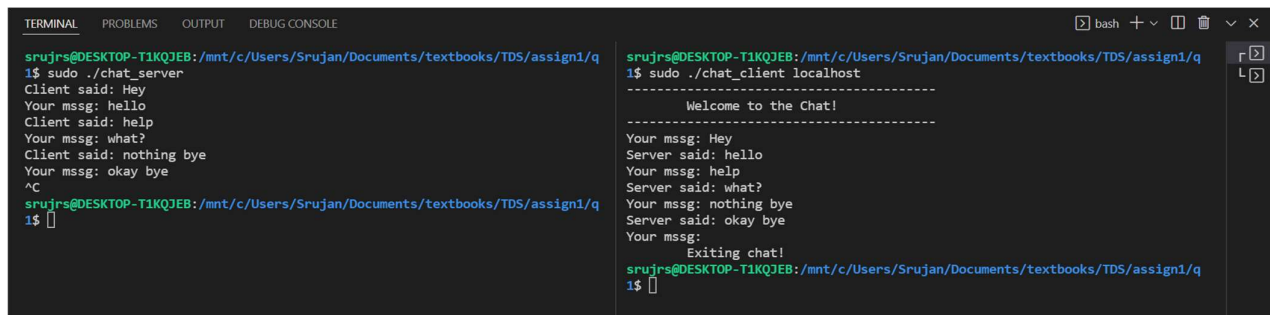# TDS ASSIGNMENT 1 – REPORT

Srujan R, BT18CSE041

A remote procedure call (RPC) is when a computer program causes a procedure (subroutine) to execute in a different address space (commonly on another computer on a shared network), which is coded as if it were a normal (local) procedure call, without the programmer explicitly coding the details for the remote interaction.
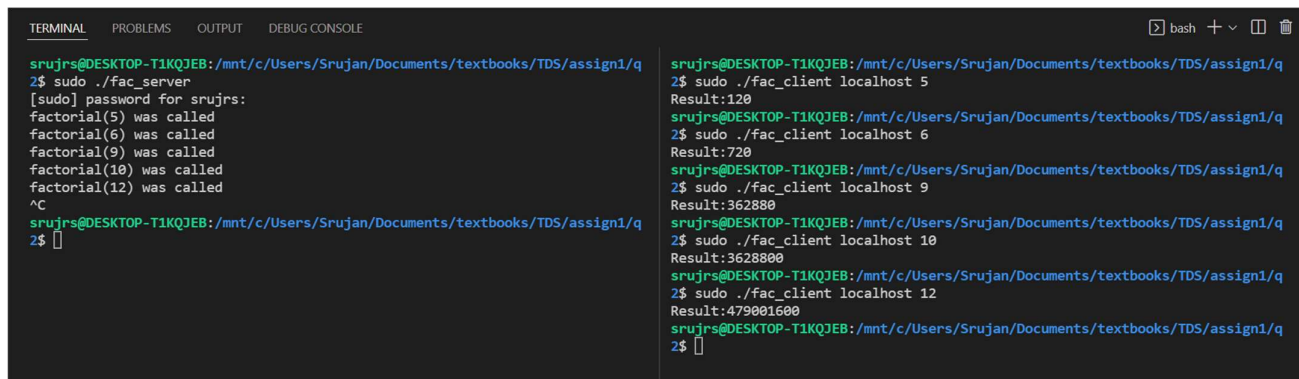
Q1: Client – Server Chat

Here I have inserted an infinite loop so that the client keeps sending messages to server till the client enters an empty string.

Q2: Factorial

Here the client is providing the server with a number whose factorial is calculated at the server and sent as an integer back to the client.

Q3: Date-time from server

```
TERMINAL    PROBLEMS    OUTPUT    DEBUG CONSOLE                                          >_ bash + ∨ ⬚ 🗑

srujrs@DESKTOP-T1KQJEB:/mnt/c/Users/Srujan/Documents/textbooks/TDS/assign1/q    srujrs@DESKTOP-T1KQJEB:/mnt/c/Users/Srujan/Documents/textbooks/TDS/assign1/q
3$ sudo ./givetime_server                                                       3$ sudo ./givetime_client localhost
Client asked for date and time!                                                 The time is Thu Feb 17 22:23:30 2022
Client asked for date and time!                                                 srujrs@DESKTOP-T1KQJEB:/mnt/c/Users/Srujan/Documents/textbooks/TDS/assign1/q
Client asked for date and time!                                                 3$ sudo ./givetime_client localhost
Client asked for date and time!                                                 The time is Thu Feb 17 22:23:33 2022
                                                                                srujrs@DESKTOP-T1KQJEB:/mnt/c/Users/Srujan/Documents/textbooks/TDS/assign1/q
                                                                                3$ sudo ./givetime_client localhost
                                                                                The time is Thu Feb 17 22:23:36 2022
                                                                                srujrs@DESKTOP-T1KQJEB:/mnt/c/Users/Srujan/Documents/textbooks/TDS/assign1/q
                                                                                3$ sudo ./givetime_client localhost
                                                                                The time is Thu Feb 17 22:23:37 2022
                                                                                srujrs@DESKTOP-T1KQJEB:/mnt/c/Users/Srujan/Documents/textbooks/TDS/assign1/q
                                                                                3$ []
```

Here the server loads the time and date from the time.h C library and then it sends the date-time details as a string back to client.