

COMP 7005

Computer Networks & Protocols

Assignment-01

User Guide

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January 26, 2025

Course Reference Number (CRN): 92522

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Purpose

This client/server application demonstrates inter-process communication using UNIX Domain Sockets. The server component accepts a parameter that acts as a key to encrypting content sent from the client using Ceaser Cipher Encryption. Upon encryption, the server sends the client the encrypted content back.

Installation

Navigate to <https://learn.bcit.ca>. Download COMP7005-assign01-v1.zip and Extract the contents.

Building

```
cd <To the Extracted Folder>/source
gcc ./client.c -o ./client
gcc ./server.c -o ./server
```

Running

Run the server first by navigating to the terminal and typing
`./server <shift value>`
`./client <File to encrypt>`

Command Line Arguments

The following configuration values can be set in <file>:

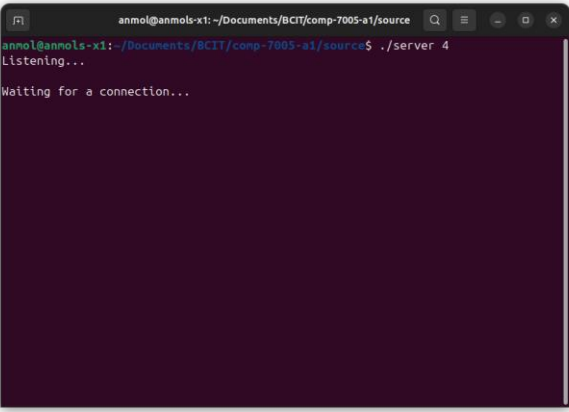
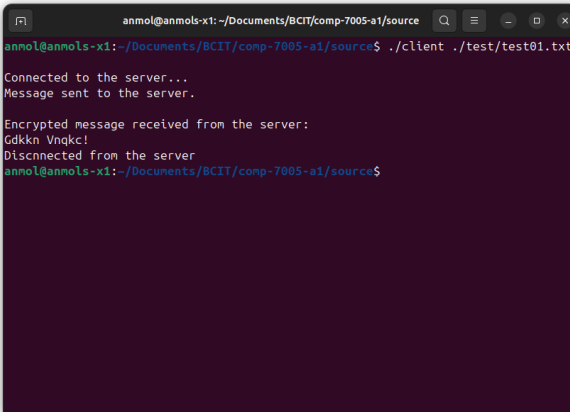
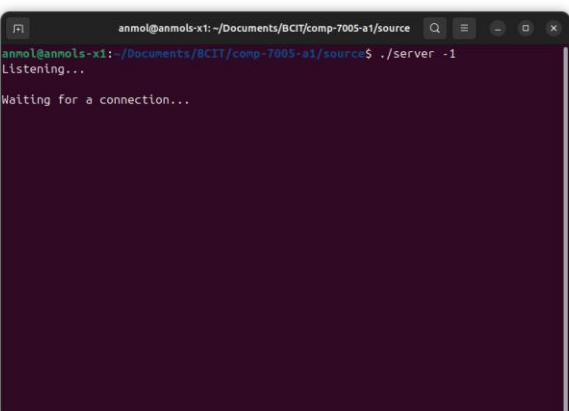
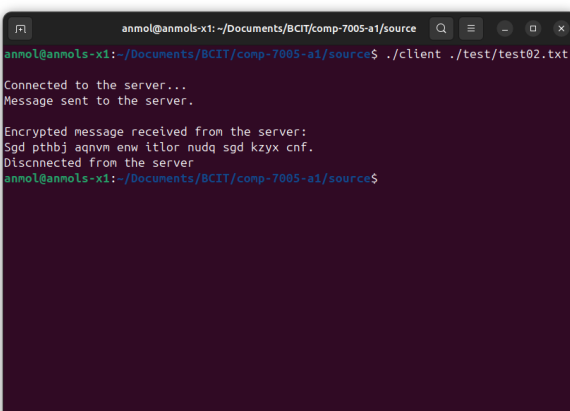
Server

Variable	Purpose
<Shift Value>	The number of positions by which each letter in the alphabet is shifted to encrypt the received file contents.

Client

Variable	Purpose
<File name>	The content of the file be encrypted.

Examples

Server	Client
 <pre>anmol@anmol-x1: ~/Documents/BCIT/comp-7005-a1/source anmol@anmol-x1:~/Documents/BCIT/comp-7005-a1/source\$./server 4 Listening... Waiting for a connection...</pre>	 <pre>anmol@anmol-x1:~/Documents/BCIT/comp-7005-a1/source\$./client ./test/test01.txt Connected to the server... Message sent to the server. Encrypted message received from the server: Gdkkn Vhgkc! Disconnected from the server anmol@anmol-x1:~/Documents/BCIT/comp-7005-a1/source\$</pre>
 <pre>anmol@anmol-x1:~/Documents/BCIT/comp-7005-a1/source\$./server -1 Listening... Waiting for a connection...</pre>	 <pre>anmol@anmol-x1:~/Documents/BCIT/comp-7005-a1/source\$./client ./test/test02.txt Connected to the server... Message sent to the server. Encrypted message received from the server: Sgd pthbj aqnm enw itlor nudq sgd kzyx cnf. Disconnected from the server anmol@anmol-x1:~/Documents/BCIT/comp-7005-a1/source\$</pre>