

# Lab 2: Socket Programming - Implementing Networked Applications

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## 1 Questions

- 1.1 Using the skeleton code from the previous lab, create a single file in C or C++ that will allow a user to create 2 sockets and connect them.**

**HINT:** You will need to use command line arguments to properly initialize which socket is the "primary host" and "secondary host."  
**HINT:** It is highly recommended that you place all your networking functions in a header (.h) file.

- 1.2 Using your newly acquired knowledge of exchanging information over sockets, write two methods (one to send, one to receive) integers over the network.**

- 1.3 Now that you have two sockets that are able to exchange data over the network, implement a function that calculates fibonacci. Use this to have the primary host send a fibonacci index to the secondary host and receive a fibonacci number from the secondary host.

**The software shall...**

- 1.3.1 Use a thread in the program

- 1.3.2 Have the primary host perform the following tasks...

1. Send the fibonacci input to the secondary host
2. Receive the fibonacci result from the secondary host

- 1.3.3 Have the secondary host perform the following tasks...

1. Receive the fibonacci input from the primary host