

## **Lab 2 - Unix System Programming**

**Prerequisites:** *localserver.c* and *localclient.c* (you may download them via moodle)

### **Exercise 1:**

Turn your server into a random-number generator. The server simply needs to send a randomly generated number when a new client connects.

*Hints:* (1) use *srand* & *rand* to generate a random number.  
(2) to send a number over the network, you may do as follows:  
`int someNumber = 7;`  
`send(someSocket, &someNumber, sizeof(someNumber));`

*Example usage:*

```
./client  
9182383
```

### **Exercise 2:**

Turn your server into a dummy FTP server. The client sends the server a file-name to be downloaded. The server simply looks for the file within its working directory and sends it to the client.

*Hints:* (1) Use code samples given in the today's lectures