CPS 472/572: Homework 6 **Dr. Clark**

RPC Programming
Due Wednesday April 23, 1997

For this homework you will reimplement the UDP time and date service application using Remote Procedure Calls. The functional requirements for the application are the same as in Homework 4.

Again, when you build this application you are to assume that the client program is not capable of determining the time and date by itself. Instead, the client must request this information from the time and date server using a remote procedure call to the server.

Your server application should provide a procedure such as *remotetime()* that returns the current time value. As in the previous assignment you can either have the server return the raw time value for processing at the client or you can have the server return the specific information requested by the user.

After responding to a request the server should then listen for more requests.

Notes:

1. You will use Rpcgen to develop this application. Study the example in Comer Chapter 22 on using Rpcgen. The sample code from this chapter is available on-line in */home/rjc/pub/cps472/hwk6*. The *Makefile* in this directory has been modified to allow building on our lab systems.

2. You can use much of your previous code for actually obtaining and processing the time of day. Make sure you fix any problems you had in the previous assignment.

3. You must test your program! Provide me with a sample output that shows all of your functions working.

4. You will turn in your assignment by printing the source code and sample output and bringing them to me. Print all of the source code including the *.x* and generated source files.

   You must also submit your program online by putting your code and sample output in a directory and then running:

   /home/rjc/pub/cps472/submit directoryname

   Make sure you provide enough information that I will be able to run your programs!