Purpose: This assignment is designed to familiarize you with external data representation. This is intended as a fairly simple drill, just to get you a little experience with XDR.

## THE SENDER

You will modify the XDR example from lecture so that the XDR stream includes a string in addition to the two integers and the a float. The string sent should always be "Hi There".

Further modify the example from lecture so that it (a) uses the get\_port() command and (b) uses uses the Comer switch (argc) with default to localhost to set the parameter passed to connectUDP. (Minor cut and paste.)

## THE RECEIVER

Modify the example receiver so that it, in addition to the two integers and float, it receives and extracts the string. In addition to the other prints; print the string.

Further modify the example from lecture so that it uses the get\_port command. Don't bother to add Comer's switch.

Files: The examples from the lecture are available in two files called send.c and receive.c found in the directory:

~volper/classes/472/programs/xdr\_example

**Submit:** A print out of the both sender and receiver. In addition, the source code for your program must be placed in your home directory in files named send.c and receive.c.

## Discussion:

You need to be careful here, the XDR routine for strings takes a third parameter, indicating the maximum size of the string. When sending the string, make sure this is larger than the size of the string. When receiving the string, this should be the size of your string buffer. On your receiver side you will need to add another array into which you can extract the string.