## Networks Project three report.

Well as some preliminary research I used filezilla, a ftp client, to send a large file to nike. The file took several minutes to send. I used wire shark to analyze the packet size. Most of the packets were about 1500bytes which seemed to be around the bottle neck size for things being sent over the internet. The length shifted to 500b later.

I also created a script using net cat command. I had to start both ends manually so it added extra time delay on both ends. This allowed for testing of how long with sending with nc would take I was sending from vcf4 to vcf4 I tried on three files and I did three tries each. The first file 105MB totally sent but the second and third files only would write 468MB. This is strange because the file times seemed to correlate with the size of the file. So I assume the nc function just has a limit on how much it can receive and write to a file. Possible I was using the command ( nc vcf4 PORT# < file(SIZE).txt & time nc -I PORT# > new(SIZE).txt)
Then I checked using wc -c the size of the files. I also checked the top of the files with head. This was anecdotal just to get some estimations of how times should look.

nc command test

bytes->	105MB	524MB	1048MB
real time 1	1.463	6.63	13.086
user time 1	0.016	0.044	0.108
sys time 1	0.438	2.405	4.31
real time 2	1.261	6.532	17.219
user time 2	0.011	0.046	0.103
sys time 2	0.339	1.398	4.57
real time 3	1.647	6.374	11.943
user time 3	0.007	0.035	0.09
sys time 3	0.293	1.275	3.734

(I'm not sure if I will be able to finish I am having a lot of problems with the sockets hopefully this no command above shows I at least tried I am submitting now before the dead line)