Socket Programming Project – Network Tester, Part One

Name	Major	Primary Objective (75 pts)	Secondary Objectives (25 pts)	Total Score (100 pts)

Evaluation Rubric – Primary Objective (60 pts possible):

Description	Points	Score
Control protocol implemented over dedicated TCP socket with Request, Reply, Done, and Result messages	50	
Separate control and data threads implemented (data thread only prints opening and closing messages in this project)	10	
Single program implements both --client and --server modes (i.e. when launched, the user decides which mode to activate)	15	
Total (75 pts possible)		

Evaluation Rubric – Secondary Objectives (25 pts possible):

Description	Points	Score
Program supports command-line argument --target to allow client to select server to contact. Default is *localhost* if not specified.	5	
Program supports command-line argument --time to allow client to select testing time period. Default is 30 seconds if not specified.	5	
CTRL-C captured for graceful exit	5	
Server implements 45 second timeout wait on data socket, and terminates test if no communication received in that period.	5	
Port field (in control message) sent in big endian data format	5	
Total (25 pts possible)		

Comments: