

Socket Programming Project – Network Tester, Part Two

Name	Major	Checkpoints (25 pts)	Primary Objective (75 pts)	Secondary Objectives (25 pts)	Total Score (125 pts)

Checkpoints (25 points possible):

Checkpoints are graded as full credit (25 points), half credit (13 points), or no credit (0 points)

Description	Points	Score
Checkpoint 1: TCP_STREAM, TCP_RR, UDP_STREAM, and UDP_RR tests are implemented.	25	
Total (25 pts possible)		

Evaluation Rubric – Primary Objective (75 pts possible):

Measure network bandwidth and round-trip latency for both TCP and UDP packets

Description	Points	Score
All requirements from Part One of Network Tester project met	15	
TCP_STREAM test Measurement: Mbits/sec	15	
UDP_STREAM test Measurement: Mbits/sec and packet loss percentage	15	
TCP_RR test Measurement: Roundtrip packets/sec	15	
UDP_RR test Measurement: Roundtrip packets/sec and packet loss percentage	15	
Total (75 pts possible)		

Evaluation Rubric – Secondary Objectives (25 pts possible):

Description	Points	Score
Nagle's algorithm disabled for TCP_RR test	5	
Client and server are silent while test is being conducted	5	
Port and packet count fields (in control messages) sent in big endian data format	5	
Testing client and server with another student (and across physical network)	10	
Total (25 pts possible)		