Comparison Report
Jonathan Nguyen
CSC316
Project 1

File Name	Uncompressed file in bytes	Compressed file by reference utility	Fraction	Uncompressed by program	Compressed by Program	Fraction
Input1.txt	60,213	25,845	.43	59,157	49,112	.83
Input2.txt	69,942	29,516	.42	68,673	57,120	.83
Input3.txt	99,949	41,249	.41	98123	80483	.82
Input4.txt	127,361	53,460	.42	125090	103701	.83
Input5.txt	122,776	50,632	.41	120527	98264	.82
Input6.txt	89,250	37,780	.42	87698	72470	.83
Input7.txt	156,817	65,376	.42	154029	127077	.83
Input8.txt	127,831	54,026	.42	125488	104664	.83
Input9.txt	185,225	76,883	.42	181502	147380	.81
Input10.txt	233,272	93,834	.40	229301	187053	.82
Small.txt	50	845	16.90	49	37	.76
Medium.txt	239	925	3.87	233	171	.73
Large.txt	8,166	4,454	.55	8026	6942	.86
Average Input files:	127263.60	52860.10	.42	124958.80	102732.40	.82
Average Total:	98545.46	41140.38	1.96	96761.23	79574.92	.81

After doing this comparison report, it seems that the reference utility would compress the file and make it significantly smaller by making the file on average about 42% the size of the uncompressed file. While the program I created would compress the file and make it only 82% the size of the uncompressed file. Some things that I took notice of is that when the reference utility compressed small files it would make the file a lot larger than the uncompressed file. Another thing I noticed is that the my uncompressed files that my program generated was off from the uncompressed file given to us and the reason for that is because it did not account for /n as a byte.