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Below times are for Window size 1.

File size / Block size	512	1024	1471
20KB	1288	2084	2738
50KB	1418	2421	3098
10MB	1566	3019	4287
30MB	1575	2955	4200

The runtimes of these files are in MBps. We can see an increase in speed of the file transfer as we would expect with an increase in the block size. This owes to the fact that we have lesser file IO operations for larger block sizes. These when compared to our lab 3 findings were slower which can be due to multiple reasons like multiple retransmissions due to ineffective window protocol namely roadrunner. As we increase the window size our speed increased and at W = 59 speeds were quite similar to the speeds in lab 3.

Below speeds and times are for block size 1024 and file size 10MB.

W	MBps	Time (s)
1	2953	3.4
2	4474	2.2
…	…	…
15	31056	0.32
….	…	…
64	68188	0.14

With the increase in window size i saw an increase in the bps. I couldn't find a W for which the throughput decreased. Again, comparing with lab 3 we can say that the difference in bps was closer for the smaller files and larger for the larger files. This can be due to the difference in data being transferred.

Part 2
I did not see any significant bps degradation for adding the encryption. This is expected as we do not perform any extra operations that add to our runtime. XOR is O(1) and since we only perform it a constant number of times, adding the key encryption would not make a huge difference.