Hunter Nelson

Performance Evaluation of Cryptography Algorithms

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Methodology

For the testing I used the planned methodology, this was using a word, sentence, and paragraph for each encryption algorithm 5 times and averaging the times. I then got the times for the encryption and decryption alone using the same method. I ran into a problem with the paragraph target object because of the parentheses causing a command injection effect, so to fix this I took out all the parentheses from the text and reran the code. Another problem during testing was SHA-256 is a hash function meaning there is no way to decrypt it, meaning the decryption and both rows are N/A or invalid.

The data shows 3 categories with 5 columns and 3 rows each. The 3 categories are for the different target objects: a word, a sentence, and a paragraph. These categories allowed me to compare the speed differences between each algorithm and the size of the inputs. Next, we had the 3 rows and 5 columns. These are just the different algorithm speeds and the average of each.