

Performance Chart

For the encrypt function:

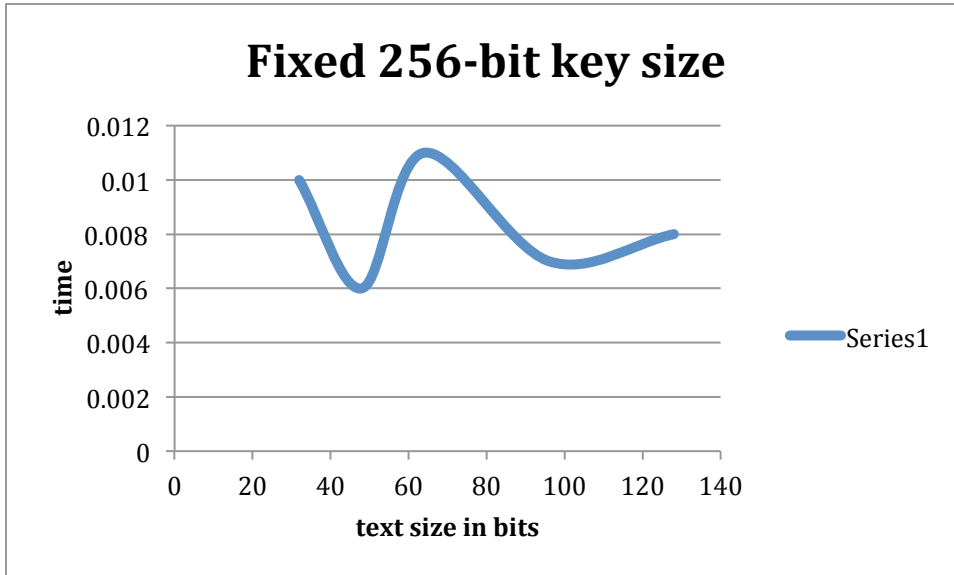
Text size/ Key size	32/ 64	48/ 72	48/ 96	64/ 96	64/ 128	96/ 96	96/ 144	128/ 128	128/ 192	128/ 256
Time	0.017	0.009	0.01	0.007	0.004	0.011	0.012	0.008	0.006	0.018

For the decrypt function:

Text size/ Key size	32/ 64	48/ 72	48/ 96	64/ 96	64/ 128	96/ 96	96/ 144	128/ 128	128/ 192	128/ 256
Time	0.005	0.008	0.013	0.006	0.01	0.008	0.009	0.012	0.005	0.012

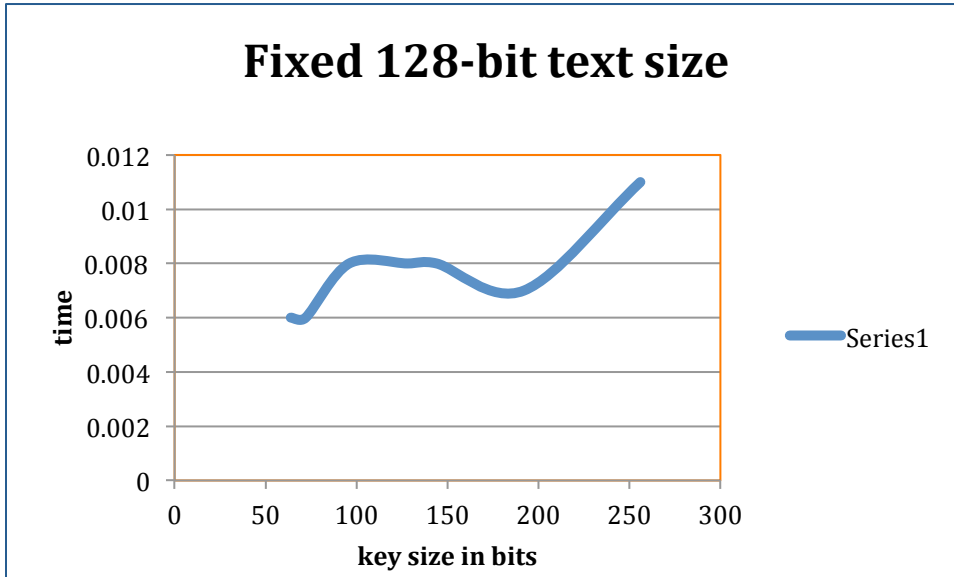
Both the encrypt and decrypt functions have similar performance times for most of the text size / key size combinations. Overall, we notice that aside for the 128/256, the other ones have similar times. As the key size or the text size increases, we do not see much of an increase of time except for the last column where a text size of 128 and a key size of 256 show an increase in the time.

For the same key size (256 bit-key) different text sizes, encrypt time:



When we keep the same key size, we do not see much of a change in the time for variable length text sizes.

For the same text size (128-bit text) different key sizes, encrypt time:



For the same text size, we see an increase in the computation time for variable length key sizes. In fact, as the key size increases, we see a general increase in the running time.