Team: 32 (The Muffin Men)
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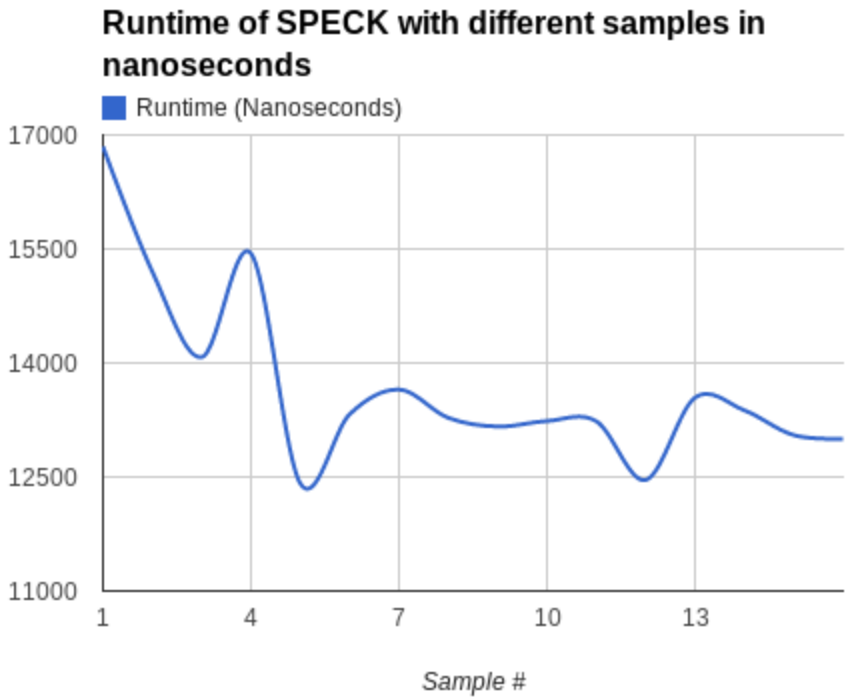

Figure (1.1)

Statistics in nanosecond(s):

Min	Max	Median	Average	Standard Deviation
12415	16846	13301.5	13706.25	1171.55290106764

Figure (1.2)

Figure 1.1 shows the the runtime of SPECK with different inputs for encryption and decryption. These inputs can be found in the test file `tests.cpp`. Since the bit-length of the input/key are fixed, we can only look at how the runtime varies depending on different inputs of the same length.

These tests run very similarly for inputs less than 64-bits because of the nature of this cipher. The addition, subtraction, and xor's are very quick and there is minimal difference if the bit is a 1 or 0. For this reason, inputs with extra leadings 0's have nearly identical runtimes.

Keep in mind that these runtimes are performed with `-O3` and with random running time disabled. Random running time is on by default to prevent timing attacks.