**Level 1: Red Pill, Blue Pill**

**Decode the following message:**

Ymnx nx dtzw qfxy hmfshj. Fkyjw ymnx, ymjwj nx st yzwsnsl gfhp.

Dtz yfpj ymj gqzj unqq—ymj xytwd jsix, dtz bfpj zu ns dtzw gji fsi gjqnjaj bmfyjajw dtz bfsy yt gjqnjaj.

Dtz yfpj ymj wji unqq—dtz xyfd ns Btsijwqfsi, fsi N xmtb dtz mtb ijju ymj wfggny mtqj ltjx.

Wjrjrgjw: fqq N'r tkkjwnsl nx ymj ywzym. Stymnsl rtwj.

Hint #1: The code is a simple letter shift cypher

Hint #2: <http://practicalcryptography.com/ciphers/simple-substitution-cipher/>

* What single letter is always capitalized?
* Identify the 2 letter words and use the “frequency analysis” tables
* Identify the most common letters and use the “frequency analysis” tables

Final Hint / Solution:

* <https://www.youtube.com/watch?v=ytftrd6rxps>

Final Question:

* What is the shift amount? How many letters is the coded message shifted by?

**Write the Decoded Message below:**

**Level 2: ASCII Code**

1. What does the ASCII acronym stand for?

American stand code for information interchange

1. What is ASCII code used for?

The code is used for representing 128 English character as numbers

1. Why can’t computers just use the letters we type or the letters used by humans when we write things down?
2. Computer only understand numbers because it sees everything as a number
3. How do computers communicate with people who speak different languages and use different alphabets? What is used instead of the ASCII code table?

Unicode is used instead of ASCII

1. Write a Python program that uses the ord() function to convert some text letters into ASCII code numbers. Print the numbers to the console screen. Provide your program listing below.

Python 3.6.1 (default, Dec 2015, 13:05:11)

[GCC 4.8.2] on linux

  ord('h')

104



 chr(104)

'h'

1. Write a Python program that uses the chr() function to convert some ASCII code numbers into text letters. Print the letters to the console screen. Provide your program listing below.

**Level 3: TBD**

tbd