CTF for teachers Subjects

Cryptography- why cryptography is important

* Caesar cypher – easy

If he had anything confidential to say, he wrote it in cipher, that is, by so changing the order of the letters of the alphabet, that not a word could be made out. Who is he?

Pm ol ohk hufaopun jvumpkluaphs av zhf, ol dyval pa pu jpwoly, aoha pz, if zv johunpun aol vykly vm aol slaalyz vm aol hswohila, aoha uva h dvyk jvbsk il thkl vba.

The flag is “Caesar”

* Base 64 – medium Who said this quote? (The true sign of intelligence is not knowledge but imagination.)

VGhlIHRydWUgc2lnbiBvZiBpbnRlbGxpZ2VuY2UgaXMgbm90IGtub3dsZWRnZSBidXQgaW1hZ2luYXRpb24u

The flag is "Albert Einstein"

* Hex- He was a gifted storyteller and liked to tell jokes. He also setup the national banking tsystem. Who is he?
* (Born: February 12, 1809 near Hodgeville Kentucky. Died April 15th 1865 at the age of 56 in Washington DC. Title presidency of the United states of America from 1861-1865. Awards and Honors the Hall of Fame for Great Americans)

426f726e3a2046656272756172792031322c2031383039206e65617220486f64676576696c6c65204b656e7475636b792e204469656420417072696c203135746820313836352061742074686520616765206f6620353620696e2057617368696e67746f6e2044432e205469746c6520707265736964656e6379206f662074686520556e6974656420737461746573206f6620416d65726963612066726f6d20313836312d313836352e2041776172647320616e6420486f6e6f7273207468652048616c6c206f662046616d6520666f7220477265617420416d65726963616e73

The flag is “Abraham Lincoln”

Stegonography- how stego works and why its important to understand

* Picture – easy 3 Pictures
* Music – medium Musical Message
* Video - hard

Phishing- understanding phishing to prevent a breach

* 5 emails - easy

Social Engineering – how it applied to their students

* How much information is to information? - easy
* Request for information - medium
* Social media questions - hard

Scripting – understanding how scripting works and how it applies to everything

* Bash - easy
* Python - medium
* Raspberry pi - hard

Website – how to find a website that could be malicious and why it is important to know what to look for.

* Underlying code to find the flag total 3 – easy medium hard

Network: Show how to find information on a network capture so they are aware of the things that may be sent out into the world in plain text. Literally just giving them a short capture and they go through to find the password or login or something along those lines.

<https://www.youtube.com/watch?v=BFcl5OciJWcv>

Open Port?

Todo:

* Find a way to incorporate the pcap puzzle
* Set up git hub with raw files and the answer keys