Week 1 Thursday

Inner Animal

Turn to someone sitting near you who you haven't met before (or who you haven't talked to much before). Take about 3 minutes to discuss:

If you could wake up tomorrow and be any (non-human) animal, what animal would you choose to be and why?

Terminology, Rectangular Transposition, Caesar Cipher

1. Alice and Bob share the keyword ZEUS. Alice uses rectangular transposition to encrypt the following *nonsense* plaintext:

MTSQAGXY

What is the corresponding ciphertext?

- (A) QMSTYAXG
- (B) TQSMGYXA
- (C) STQMXGYA
- (D) QTMSYGAX

2. Alice encrypts the following message using a Caesar cipher with a shift of 1.

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Zeus is hiding in a cave
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What is the corresponding ciphertext?

(A) YDTRHRGHCHMFHMZBZUD

(B) AFVTJTIJEJOHJOBDBWF

(C) BGWUKUJKFKPIKPCECXG

(D) None of the above.

3. The following message was encrypted using rectangular transposition with the key word SNAKE. What is the plaintext?

DSUEMSEDIAJQQDA

4. A Caesar cipher with a shift of 30 is the same as a Caesar cipher with a shift of:

(A) 1

(B) 2

(C) 3

(D) None of the above

5. The following message was encrypted using a Caesar cipher with shift of 3. What is the plaintext?

KHUFXOHVVWROHPBKRUVHV