- 1. Coursera Dan Boneh Week 1 Program Assignment
- 2. PA1 "crack" ciphertexts generated using a Vigenere-like cipher
- 3. PA2 decrypt a challenge cipher text generated using AES in CBC-mode with PKCS #5 padding.
- 4. http://www.cryptopals.com/sets/1
  - (1) Convert hex to base64
  - (2) Fixed XOR
  - (3) Single-byte XOR cipher
  - (4) Detect single-character XOR
  - (5) Implement repeating-key XOR
  - (6) Break repeating-key XOR
- 5. http://www.cryptopals.com/sets/2
- (1) Implement PKCS#7 padding
- /D (2) Implement CBC mode
- (3) An ECB/CBC detection oracle
- /2 (4) Byte-at-a-time ECB decryption (Simple)
- (5) ECB cut-and-paste
- $/ \phi$  (6) Byte-at-a-time ECB decryption (Harder)
- (7) PKCS#7 padding validation
- (8) CBC bit flipping attacks