**Intro to crypto practice problems**

*Remember to use the resources linked in the presentation.*

1. What is 3110 in base 16?
2. Decrypt “66 6C 61 67 7B 73 30 5F 73 6D 34 72 74 7D”.
3. Decrypt “ZmxhZ3t0UnUzX2czbjF1NT99”.
4. Convert “34852863801144368425092969724804324356733” to hexadecimal and then as bytes to ASCII.
5. Oops! I seem to have XORed my message by accident. I encrypted it with the key “SECRET” and my ciphertext is “)\*.0,1”. Can you recover it for me?
6. Somebody Caesared my flag again… Can you unscramble “synt{guvf\_vf\_n\_greevoyr\_pvcure}”?
7. Find the secret message in the essay (go to **problem7.txt**).
8. Die Flagge ist diesmal in deutscher Sprache (**problem8.txt**).
9. If you think you are ready for a challenging problem, try **problem9.txt**. This problem comes from a real CTF (RedpwnCTF 2019).

**Answers**

1. 1F16
2. flag{s0\_sm4rt}
3. flag{tRu3\_g3n1u5?}
4. flag{r34l\_h4cK3r}
5. zombie
6. flag{this\_is\_a\_terrible\_cipher}
7. green bean
8. flag{deutsche\_master}
9. flag{th1s\_fl4g\_1s\_1ntu1t1v3}