CRYPTOGRAPHY MISSION 03 DOSSIER

Deadline: Thursday, 15 September 2016 at 3:05pm
This mission covers Sections 2.8, 2.9, 2.10, and all Classical Ciphers.

Check one:

☐ I received help from the following classmate(s) on this assignment:

_____ .

☐ I did not receive any help on this assignment.

1. Graded Problems

1. Read through the "Examples of basic usage" section for Python's pseudo-random number generators (`https://docs.python.org/2/library/random.html`).

   a. In SageMath, generate 5 pseudo-random numbers using `random()`, and write them here (round to 4 decimal places).

   b. Write down the code for generating a random integer from 1 to 100. Generate 3 such numbers and write them here.

c. Write down the code for generating a random odd from 1 to 101. Generate 3 such numbers and write them here.

2. Bletchley Park was where a lot of cryptography happened during World War II. Watch `https://www.youtube.com/watch?v=wlWVpOzgrL4`, and write down two facts that you learned here.

3. If `11010010` is your plaintext message, and `10101010` is the key, what is the ciphertext using a One-Time Pad?

4. Make a list of all the Classical Ciphers we have covered so far to remember what they are. These might be used in the "Escape Room" activity on 9/15.

2. Recommended Exercises

None from the book this time!