Design for text→image and image→text.

Goal: When a user enters text in the text area, and clicks encode, the text gets converted an image of black and white pixels. Also the user should be able to click decode when the secret image is selected and convert that image to text.

Specifications this functionality needs to follow:

1. Turn the text into binary using the extended ascii table.

2. Use the cover image to decided what size to make the secret image

3. Each 0 in the binary string will represent a black pixel

4. Each 1 in the binary string will represent a white pixel

5. Iterating over the image will have in major column order.

6. If there are more digits in the binary string then there are pixels in the picture, the extra digits will be truncated.

7. If there are less digits in the binary string than there are pixels in the picture, the image will get padded with 0's. We are padding the left part of the image with 0's that way when decoding we will just skip past all the 0's until the first 1 has been read.

Scratch work to help visualize what the code is going to do:

1. Test string = "Hi"

2. "Hi" in ascii = "0100 1000 0110 1001"

 3. And here is the image should like using that binary string for different sized secret images.

Case 1: Secret image is 4x4:

Expected Secret Image:

Case 2: Secret image is 2x2:

Expected Secret Image:

Case 3: Secret image is 6x6:

Expected Secret Image: