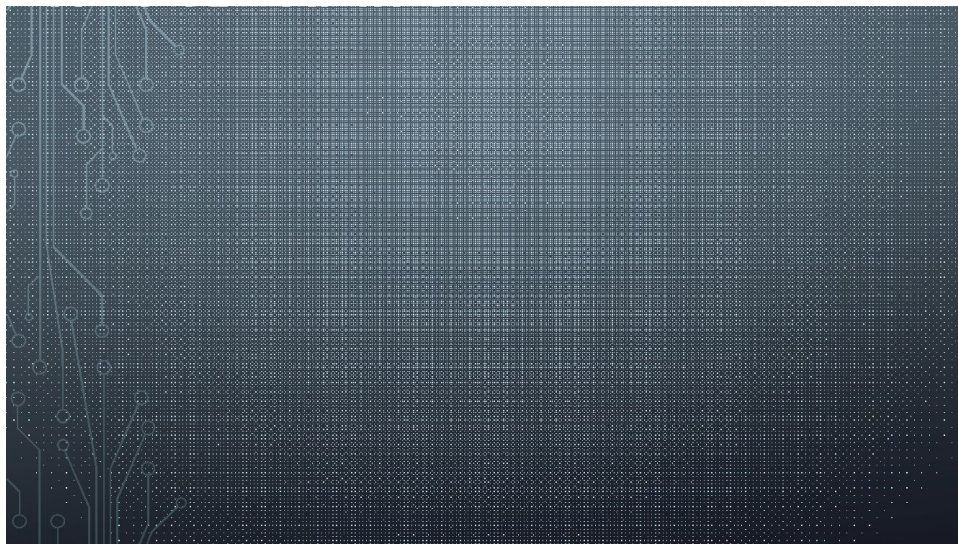


SLIDE 1



SLIDE 2

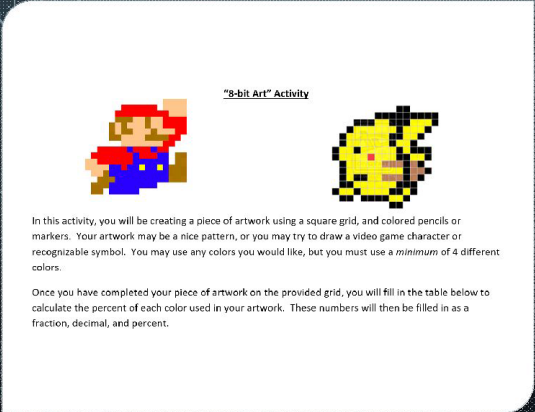


All documents for the projects can be found at the following link:

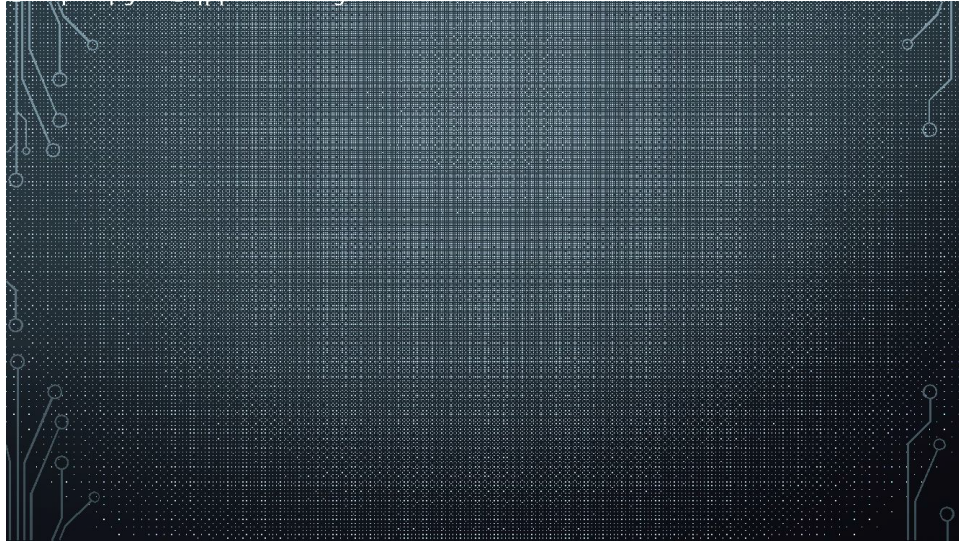
https://drive.google.com/drive/folders/19le7KMb5qwlHdGW2OjfR_QzobZn-T41Z?usp=sharing

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

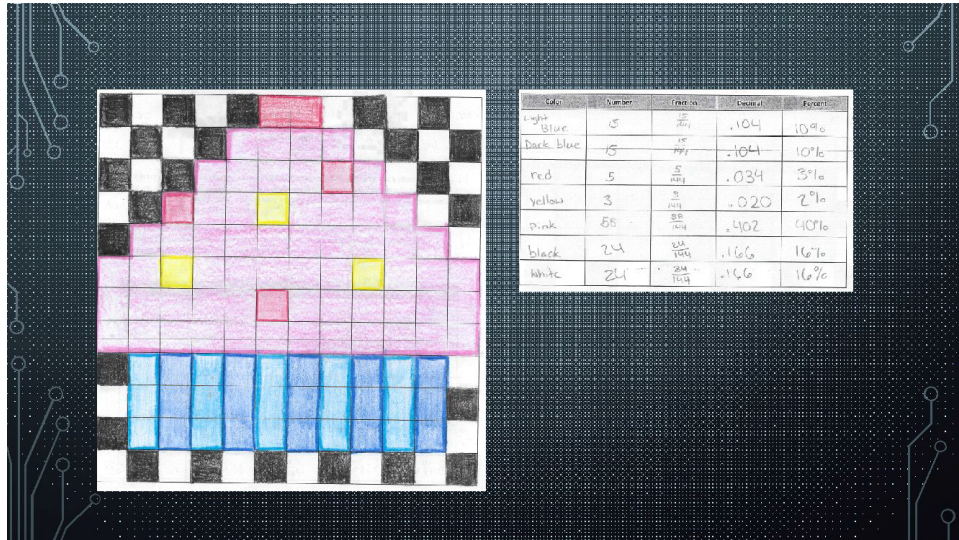
SLIDE 3

[illegible]

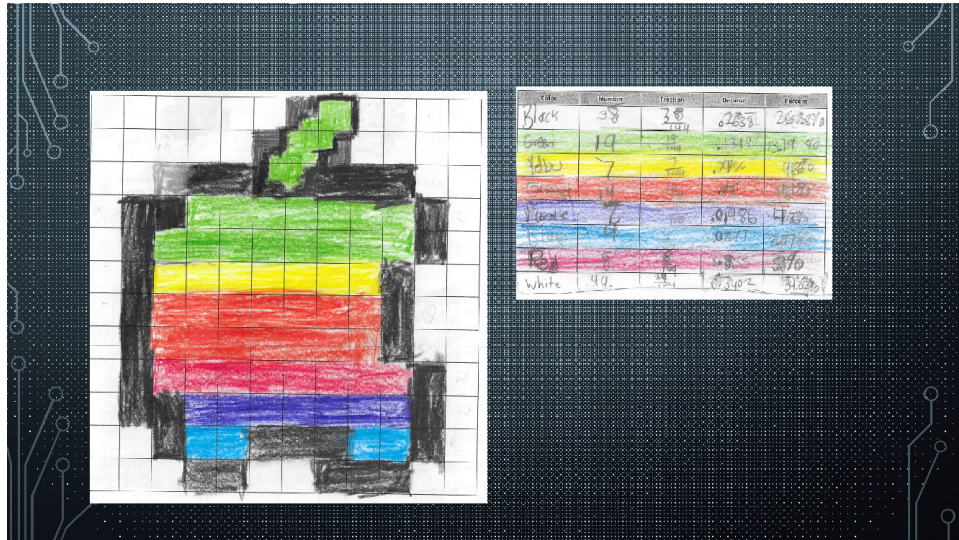
SLIDE 4

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

SLIDE 5

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

SLIDE 6

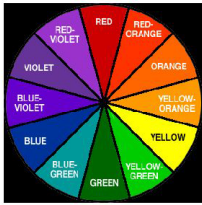


SLIDE 7

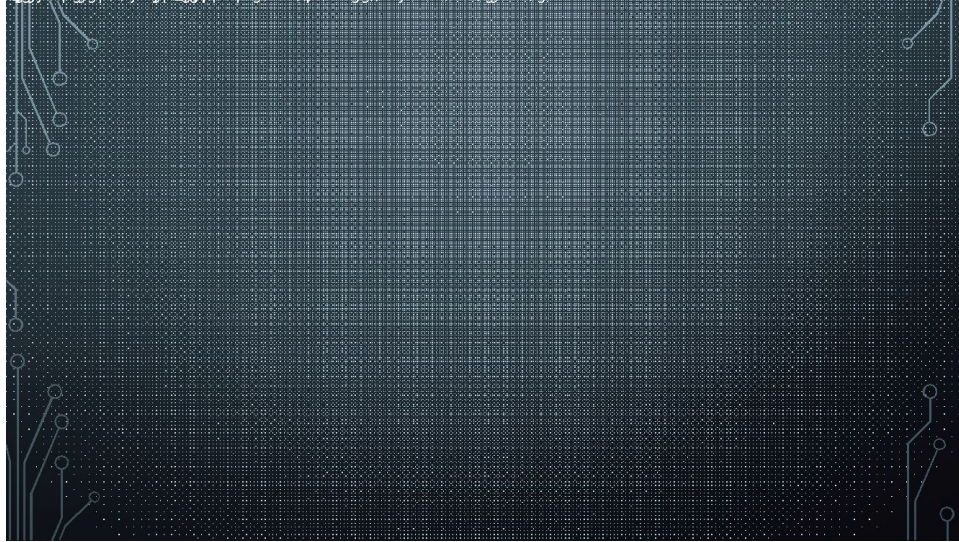
Chapter 13 – Transformations Take-Home Project

For this project, you will be showing what you have learned with transformations using a figure or pixel character of your choosing. Once you have chosen your character, you should plot it on a piece of graph paper, and record the coordinates of your figure (you will be drawing your figure multiple times). It may be a good idea to have one pre-image of your figure in the 1st Quadrant, and one pre-image of your figure centered about the origin.

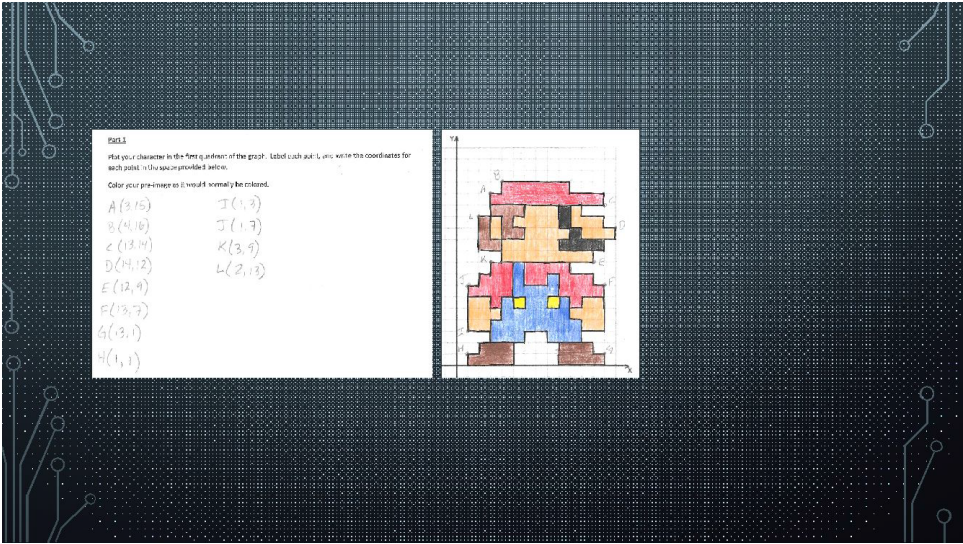
We will also be using some of the ideas that have been discussed in Art classes about color theory and different color schemes to highlight the different transformations that are being performed.



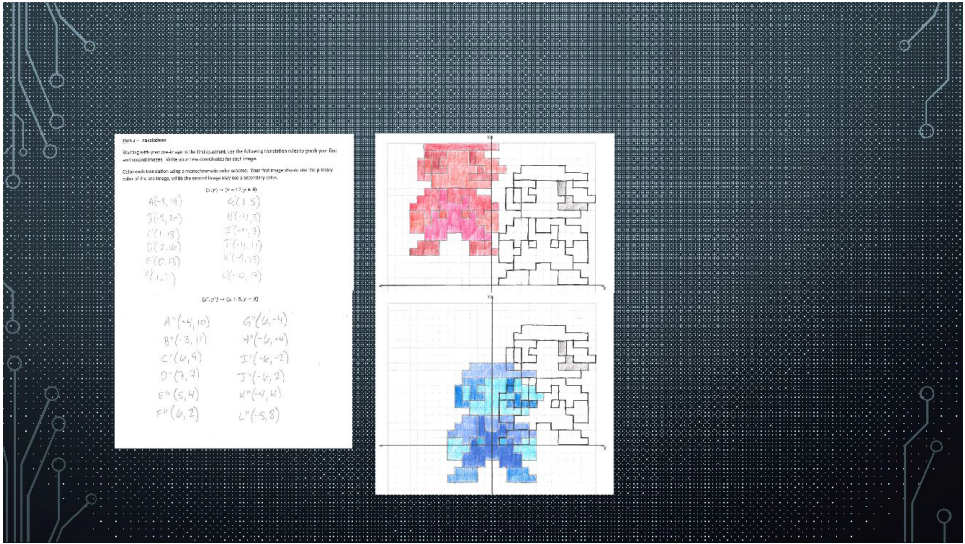
SLIDE 8

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

SLIDE 9



SLIDE 10



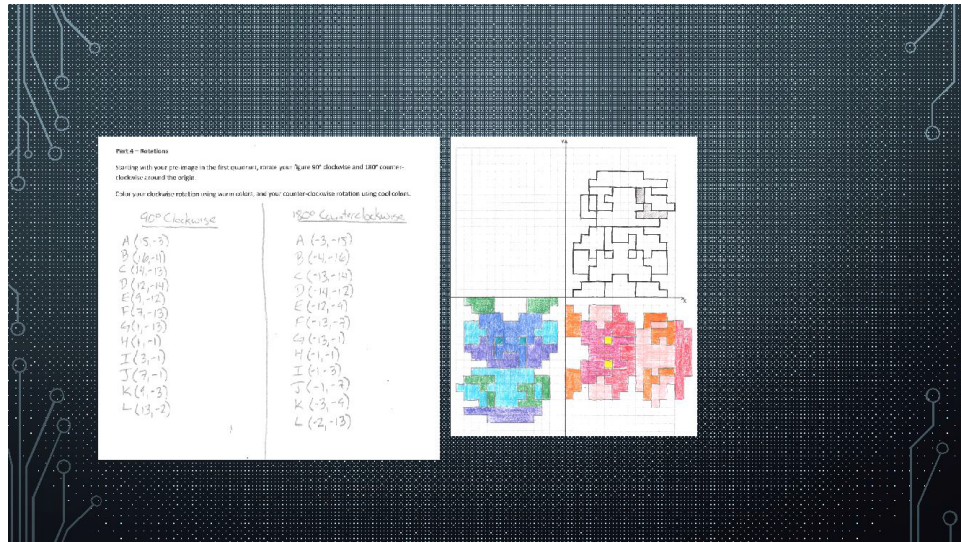
SLIDE 11

Slide 11 - Reflection

Starting with your pre-image in the first quadrant, reflect the figure over the x-axis. Then reflect your pre-image over the origin (the line $y = -x$). Then reflect your pre-image over the y-axis. (There should be 3 images for the pre-fig.) Color each image using an opposite or complementary color. (You should not use the original color for any of your images.)

Over $x = -x$	Over $y = -y$	Over $y = -x$
A (3, 15)	A (-3, 15)	A (-3, -15)
B (4, 16)	B (-4, 16)	B (-4, -16)
C (13, 17)	C (-13, 17)	C (-13, -17)
D (14, 12)	D (-14, 12)	D (-14, -12)
E (2, 9)	E (-2, 9)	E (-2, -9)
F (3, 7)	F (-3, 7)	F (-3, -7)
G (5, 1)	G (-5, 1)	G (-5, -1)
H (1, 1)	H (-1, 1)	H (-1, -1)
I (1, 3)	I (-1, 3)	I (-1, -3)
J (1, 7)	J (-1, 7)	J (-1, -7)
K (3, 4)	K (-3, 4)	K (-3, -4)
L (2, 13)	L (-2, 13)	L (-2, -13)

SLIDE 12



SLIDE 13

Part 3 - Dilation

Starting with your pre-image centered about the origin, perform a dilation with a scale factor of 3.

Color your image using a lighter shade of each original color from your pre-image.

On a separate graph, perform a dilation with a scale factor of $\frac{1}{3}$.

Color your image using a darker shade of each original color from your pre-image.

The slide features a dark blue background with a grid pattern. On the left, a text box contains instructions for a dilation project. To the right, there are two grid images. The top grid shows a dilated image of a character (a blue and red figure) with a scale factor of 3, colored in lighter shades of the original. The bottom grid shows a dilated image of a character (a blue and red figure) with a scale factor of $\frac{1}{3}$, colored in darker shades of the original.

SLIDE 14

Part 6 – Multiple Transformations (Extra Credit)

Starting with your figure in the first quadrant, perform the following series of transformations for extra credit (color each transformation using the same coloring techniques as the parts above):

- 1) Reflect your figure over the y-axis
- 2) Dilate your figure with a scale factor of 2
- 3) Rotate your figure 180° about the origin
- 4) Translate your figure $(x, y) \rightarrow (x - 10, y + 5)$

Part 6 – Multiple Transformations (Extra Credit)

Starting with your figure in the first quadrant, perform the following series of transformations for extra credit (color each transformation using the same coloring techniques as the parts above):

- 1) Reflect your figure over the y-axis
- 2) Dilate your figure with a scale factor of 2
- 3) Rotate your figure 180° about the origin
- 4) Translate your figure $(x, y) \rightarrow (x - 10, y + 5)$

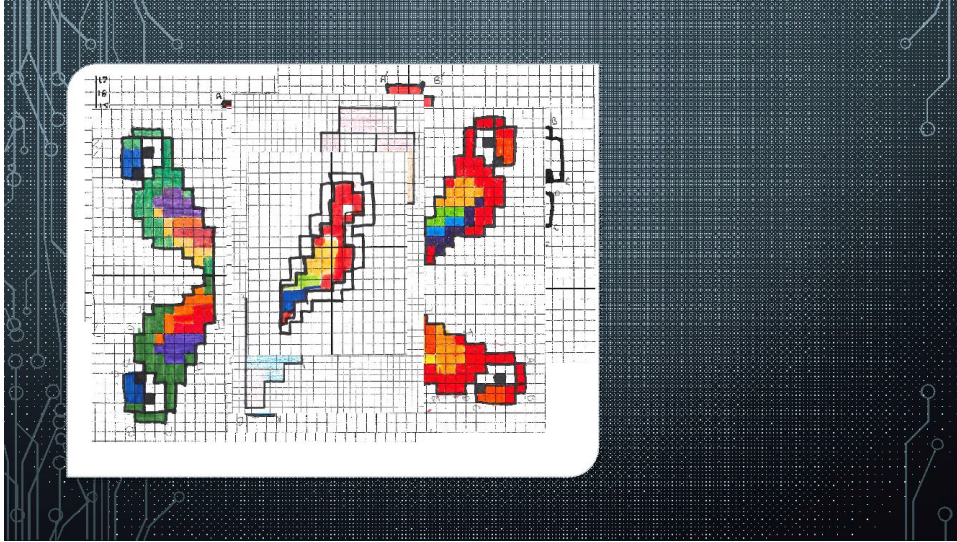
- Part 6 – Multiple Transformations (Extra Credit)**
- Starting with your figure in the first quadrant, perform the following series of transformations for extra credit (color each transformation using the same coloring techniques as the parts above):
- 1) Reflect your figure over the y-axis
 - 2) Dilate your figure with a scale factor of 2
 - 3) Rotate your figure 180° about the origin
 - 4) Translate your figure $(x, y) \rightarrow (x - 10, y + 5)$

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

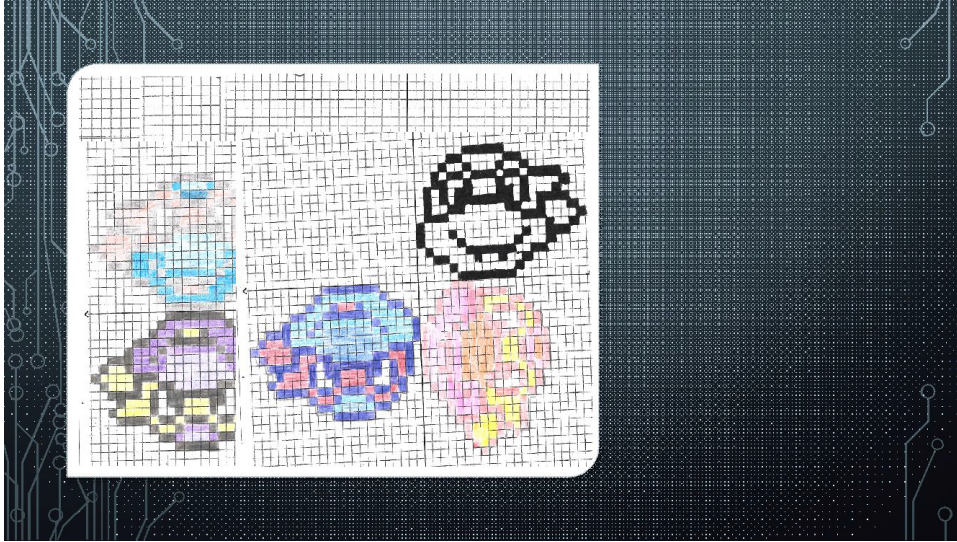
SLIDE 15

[illegible]

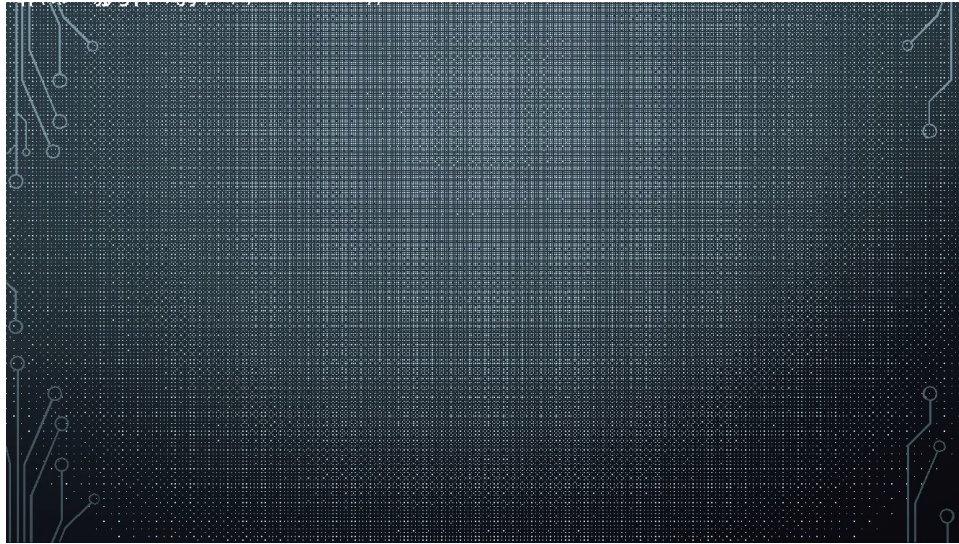
SLIDE 16

[illegible]

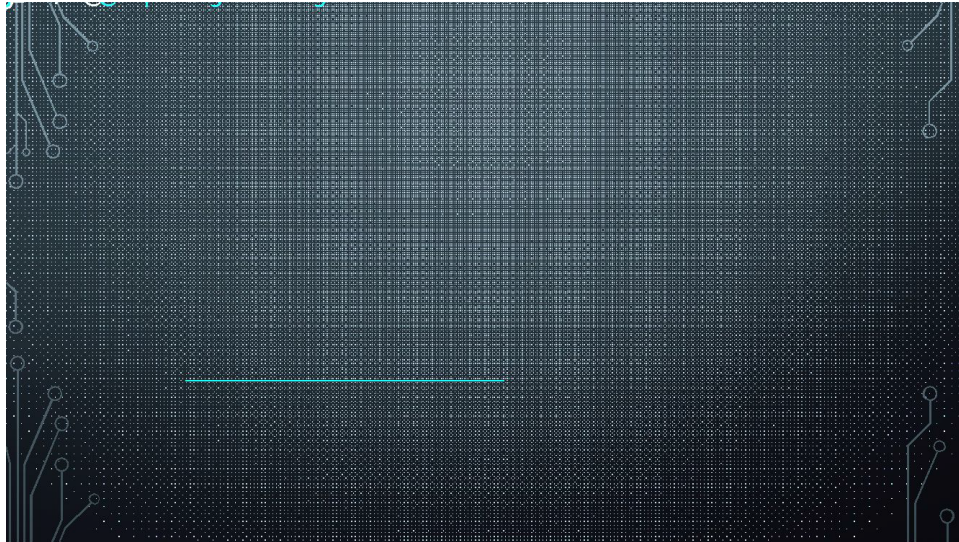
SLIDE 17

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

SLIDE 18

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slight shadow on its right side, suggesting it's resting on a surface.

SLIDE 19



Reminder, all documents for the projects can be found at the following link:

https://drive.google.com/drive/folders/19le7KMb5qwlHdGW2OjR_QzobZn-T41Z?usp=sharing

[illegible]