## La Porte High School AP Computer Science Principles Outreach Learning 18 May – 25 May 2020

AP Computer Science Principles Week of 18 May – 25 May 2020	
Teacher/Team:	cornettj@lpisd.org
If there are any questions, please feel	
free to email me/us at:	AP Computer Science Principles
(Email Address of the Teacher	
	Codehs.com
Link to TEAMS Folder	
Previous Lessons:	
Link to: (Resources).	

# Objectives

#### Objective / I Can:

In this lesson, students will learn how computers break down images into concrete values that can be stored. Students will learn how images are represented digitally using pixels.

# Objective

Students will have a basic understanding of how we can encode images as data.

# **Enduring Understandings**

This lesson builds toward the following Enduring Understandings (EUs) and Learning Objectives (LOs). Students should understand that...

- EU 1.2 Computing enables people to use creative development processes to create computational artifacts for creative expression or to solve a problem. (LO 1.2.3)
- EU 1.3 Computing can extend traditional forms of human expression and experience. (LO 1.3.1)
- EU 2.1 A variety of abstractions built on binary sequences can be used to represent all digital data. (LOs 2.1.1, 2.1.2)
- EU 2.2 Multiple levels of abstraction are used to write programs or create other computational artifacts. (LO 2.2.3)
- EU 3.2 Computing facilitates exploration and the discovery of connections in information. (LO 3.2.1)
- EU 5.3 Programming is facilitated by appropriate abstractions. (LO 5.3.1)

#### **Activities**

### La Porte High School AP Computer Science Principles Outreach Learning 18 May – 25 May 2020

<u>Student Activities</u>: (Resources, videos for students to use.)

Go to Teams Folder. Look for the assignment:

- 1. <u>9.4.1 Pixel Images</u>
- 2. <u>9.4.2 Pixel Images Quiz</u>
- 3. 9.4.3 Creating Pixel Images
- 4. 9.4.4 CodeHS Logo
- 5. <u>9.4.5 Checkerboard</u>
- 6. <u>9.4.6 Ladder</u>
- 7. <u>9.4.7 Create an Image!</u>

### **Academic/Instructional Support**

Schedule:	Teacher Support - TEAMS
	Office Hours: 8 – 12
	Email: cornettj@lpisd.org
Office Hours	

## To Be Graded

Assignment for students to submit to TEAMS Folder:

- <u>9.4.2 Pixel Images Quiz</u>
- <u>9.4.5 Checkerboard</u>
- <u>9.4.6 Ladder</u>
- <u>9.4.7 Create an Image!</u>

When is it due? 22 May 2020

- <u>9.4.2 Pixel Images Quiz</u>
- <u>9.4.5 Checkerboard</u>
- <u>9.4.6 Ladder</u>
- <u>9.4.7 Create an Image!</u>

How will it be submitted?

# La Porte High School AP Computer Science Principles Outreach Learning 18 May – 25 May 2020

Electronically, except by individual arrangement.