Teacher: Jessica Novillo Argudo, Harrison Fung

Unit Plan:

Lesson: Pseudocoding Gerrymandering code **Grade and Course:** Grade 10 AP CS Principles

Date:

Overall Goal/Objective of Lesson: Given the videos and presentation, I can create pseudocode for the code that is provided.

Content Objectives	Assessments
Skill Objectives	Student written responses in Pear Deck link to
How to write pseudocode	presentation
Standard here:	
9-12.CT.4	
Implement a program using a combination of student-defined and third-party functions to organize the computation.	
Clarifying Statement:	
The focus is on having students think about how to decompose a programming problem into functions and procedures, including working around the constraints imposed by specific functions or features provided in a library.	
Content-specific vocabulary: Pseudocode, Flowchart, functions, variables, parameters	
Assessments: Students will create pseudocode for the code provided, done in JavaScript.	

Materials/Resources:

Code HS

https://codehs.com/curriculum/projects/proj-new-project-4

Solution

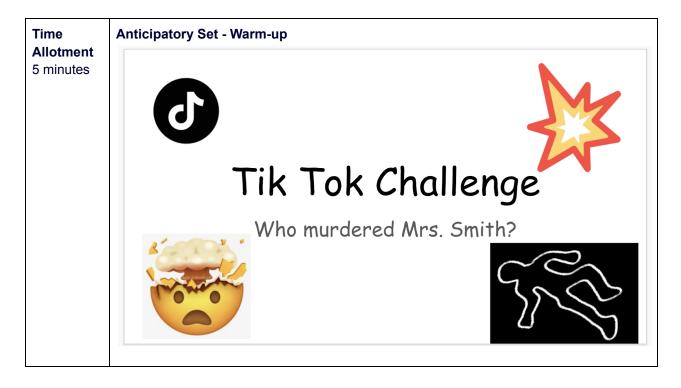
https://codehs.com/library/solution_references/assignment/90252765

What is Pseudcode?

https://www.codecademy.com/resources/videos/playlists/PLFzsFUO-y0HB1bMOpWwaLE6-1KD9lvINB/PwGA4Lm8zuE(play video up until 3 minute mark)

Presentation

Sequence of Lesson Plan



Mrs Smith was killed in her home on a Sunday evening.

There were five people in the house at the time of the murder. The police ask them what they were doing at the time of Mrs. Smith's murder.

Read the following five witness statements carefully to determine who was the murderer.

Chef: "I was preparing dinner."

Mr Smith: "I was in the garden looking at the stars with my telescope."

Gardener: "I was pruning the trees."

Maid: "I was setting the dinner table."

Butler: "I was in the cellar getting wine for the meal."

The murderer is ...

Mr. Smith

because during the evening hours, you cannot see the stars. The evening is said to be between 6pm - 9 pm.

Notable mention:

The gardener because you wouldn't be doing gardening at night.

20 minutes	Lesson
	Powerpoint presentation 3 minute video on pseudocode + group discussion on why it is important for coding.
	What is Pseudocode? https://www.codecademy.com/resources/videos/playlists/PLFzsFUO-y0HB1bMOpWwaLE 6-1KD9lvINB/PwGA4Lm8zuE
	Groups will be created for the students to discuss the importance of pseudocoding. It is important for them to understand the concept before diving straight into the practice/application.
15 minutes	Practice
	Students can work on the coding parts of the gerrymandering code in Code HS https://codehs.com/library/solution_references/assignment/90252765
	There are mild, medium and spicy versions for the different levels of students to do the pseudocode. These are posted in the presentation.
2-5 minutes	Closing
	Exit ticket: In the pear deck, describe one reason why you think Pseudocode is important for writing an algorithm.