Remix 4: Missions 10-11

- Come up with ideas on using CodeX and physical computing in a favorite subject area and create a program that demonstrates your idea.

Remix Coding Project	
Assignment: Create a remix (your own original program) using the concepts from Mission 10 and 11 specifically. You will also use concepts from the earlier missions. Some suggestions are given below. Do as many remixes as you want to try.	**Hints:** ● Think about subjects that you are learning, and try to solve a problem using CodeX (see pg. 2 for some examples to get you started). ● Use the sandbox to code the remix project. The sandbox is found above the toolbox, in the lower left-hand corner. ● You can have several tabs open at the same time. Use your code from the last missions to guide you.

Mild	Medium	Spicy
For a beginner or elementary school student Modify the "Spirit Level" program to display a symbol (or different shape) when the level is at the 0 mark. **Example:** Your program could do this: ▶ Day4Remix Mild **Mild** *For a beginner or elementary school student* Modify the "Spirit Level" program to display a horizontal line and move in both an x and y direction.	*For an intermediate programmer or middle school student* Create a game that displays two colors, or two images, etc. Map the colors or images to Button A and Button B. Then display a color or image and the player must press the correct button to earn a point. **Example:** Your program could do this: ▶ Day4Remix Medium **Medium Alternative::** Design a project with CodeX that incorporates concepts, tools, lessons or instructional aids for a specific subject / grade level. Describe input and output and the logical flow (step-by-step directions) of the program.	*For an advanced programmer or high school student* Modify the game from the "Medium" challenge to vary the speed of the displays. include a way to win or lose, and display the result of the game. **Spicy Alternative::** After designing a project for a specific subject / grade level, code your project. **Example:** Your program could do this: ▶ Day4Remix KalaJo ▶ Day4Remix Felix

Examples of physical computing in subject areas:

- **Physical Education:** Step counter, HIIT timer, etc.
- **Art:** Color mixing
- **Music:** Visual metronome
- **English:** Interactive storytelling, vocab quiz
- **History:** historical perspectives game, historical timeline
- **Math:** create a 5-function calculator**,** draw line/circle, quiz game
- **Science:** measuring gravitational acceleration, tracking light levels (solar irradiance)