

## Overview

### The Output Box

### The Stop and Resume Button

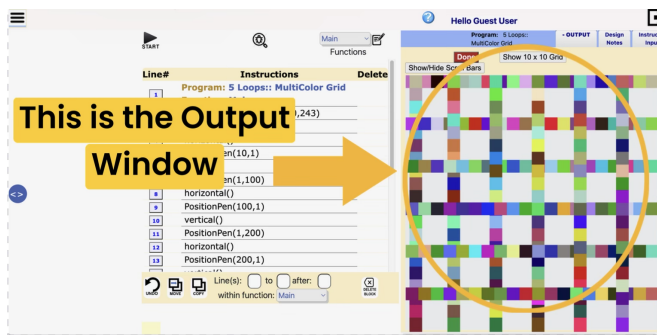
### Adding a Grid to Your Program

## Overview

In this step-by-step guide, we will be going over how to use any feature you can in the Output Window to better view your programming. How to play your program, dynamically stop and resume your program through the Output Window, and how to set a grid up for your program to see clearly what you are doing.

## The Output Box

When opening up the website, as mentioned in other manuals, you will find the output window on the right-hand side of your screen when looking at programming an assignment.



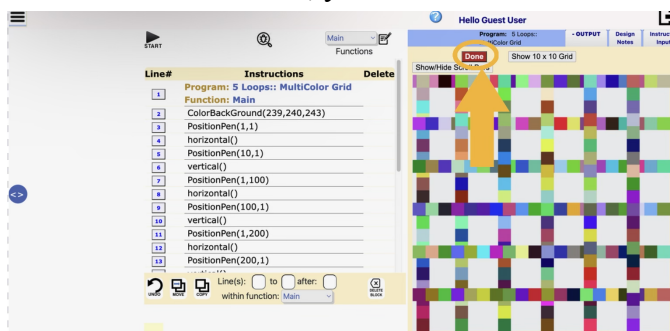
When it comes to the output window, the purpose of this window is to show you what the program that you are creating in the program window looks like. It's a way for you to see your coding visually and whether or not you are doing it correctly.

**Many features can be used when viewing your program.** The first one we will be going over is the *Stop* feature. **In this step-by-step guide, we will be using the assignment 'Pattern Generation' as an example.**

## The Stop and Resume Button

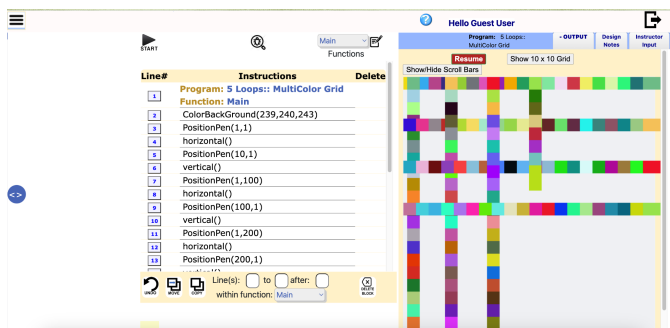
When you start up your program, you should see the program appear in the output window. **Sometimes the program is shown with slight animation.** Now let's say that you want to be able to **stop the program at a certain point**; that is possible through the *stop button*.

To be able to locate this feature, you need to look above where your program will be shown.



In this example, when we press play we see that our program creates a **plaid type pattern**. But as stated, it **appears in an animation fashion**. Which means that it **shows line-by-line in the output window**.

So let's say we want the animation to **stop mid-way**, we can do that! Just click on the stop button, before it is finished appearing.



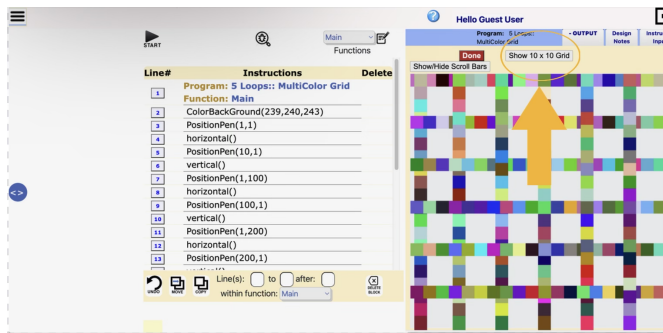
When doing that, you will now see the program stop animating mid-animation. However, when you click stop, if you see in the image above, you can see that the *stop* button changes to a *resume* button. When you click on it, it allows your program to continue to animate and finish showing the program completely.

Another feature in the output window that you can use to help when using this type of coding is the *grid* feature.

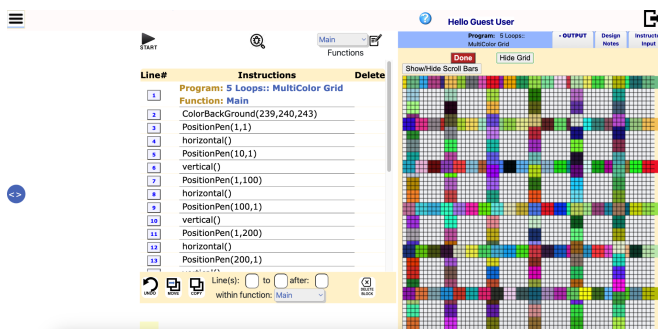
# Adding a Grid to Your Program

So in this assignment example, we are using stitch-pattern-like coding. This means that the instructions repeat themselves to create a clear image using pixels. Our program **using pixels is very important when using the *grid* feature.**

To locate this feature, you will find it **right above the output window.**



In this assignment, we see that **the grid will appear as a 10 x 10 grid.** Sometimes the grid changes, it just depends on the assignment. But the point of the grid is to be able to show each pixel square by square. A clearer image if you will.



After the grid appears, we should see each pixel appear in a more defined manner. And just like the *stop button*, we will see that **after clicking on the show grid, we can also hide the grid.** By doing so we can make the grid disappear and show the program without the grid.