

# Crazy Little Thing Called Py – PyGame 1 Exercise

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1. Make sure that you know how to modify the code so it can display a grid with a different number of rows and columns (e.g., 15x15, 30x30).
2. Make sure you understand colors and how to set them - Change the code so that left-clicking a cell changes its color to blue, middle-clicking changes its color to purple, and right-clicking changes its color to yellow.
3. In our code, clicking the middle mouse button marks the selected cell as the starting point of the maze and colors it green, but there can be only one starting point. Can you alter the code so that selecting a new starting point will change the previous one to an empty (white) cell? The same should be done for the destination cell (right click).
4. We saw how to write text to the screen, and we saw how to draw rectangles at the correct places on the screen. Combine these two abilities by adding a feature that keeps track of the number of times each cell has been clicked and displays the count for each cell.
5. Add a reaction to another event (another mouse event or even a keyboard event) that resets the grid to its original state (i.e., all cells set to 0 and the screen is redrawn).
6. NumPy has quick ways of saving its matrices. Try to add a feature that allows the user to save the state of the grid to a file and to load a saved grid from a file.