

# Assignment 23: Patterns

## Goals

1. Learn how to modify and display a ColorGrid using Bridges
2. Learn how to set/change colors for each pixel in the grid
3. Practice using simple loops to display patterns using the BRIDGES ColorGrid data structure

## ColorGrid

The BRIDGES ColorGrid class is an abstraction for representing 2D images. It serves as a convenient way to display operations on images or other two dimensional structures. A similar structure is used in the BRIDGES Game API.

### Assignment

- Use Bridges ColorGrid to display a simple pattern
- Call ColorGrid.set() method to set the color of a pixel in the grid (the color is passed as a generic of the class to the method)
- Loop through the grid and set each pixel to match a pattern

### Examples

- Checker board, display 2 colors in an alternating checker board pattern or something thats interesting or relevant to you, your school's colors, mascot, team.
- Frame, display a frame around the entire board with the center filled
- Quadrants, Cut the image in four quadrants of different colors
- Or make a customized pattern of your own

## Help

### for C++

[ColorGrid documentation](#)

[Color documentation](#)

[Bridges documentation](#)

### for Java

[ColorGrid documentation](#)

[Color documentation](#)

[Bridges class documentation](#)

### for Python

[ColorGrid documentation](#)

[Color documentation](#)

[Bridges documentation](#)