

```

public void mirrorVertical()
{
    Pixel[][] pixels = this.getPixels2D();
    Pixel leftPixel = null;
    Pixel rightPixel = null;
    int width = pixels[0].length;
    for (int row = 0; row < pixels.length; row++)
    {
        for (int col = 0; col < width / 2; col++)
        {
            leftPixel = pixels[row][col];
            rightPixel = pixels[row][width - 1 - col];
            rightPixel.setColor(leftPixel.getColor());
        }
    }
}

```

*Right To Left*

```

public void mirrorVertical()
{
    Pixel[][] pixels = this.getPixels2D();
    Pixel leftPixel = null;
    Pixel rightPixel = null;
    int width = pixels[0].length;
    for (int row = 0; row < pixels.length; row++)
    {
        for (int col = 0; col < width / 2; col++)
        {
            leftPixel = pixels[row][col];
            rightPixel = pixels[row][width - 1 - col];
            rightPixel.setColor(leftPixel.getColor());
        }
    }
}

```

*left                      right*

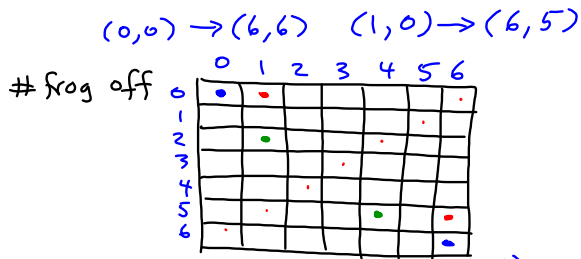
Horizontal // top to bottom

```

public void mirrorVertical()
{
    Pixel[][] pixels = this.getPixels2D();
    Pixel leftPixel = null;
    Pixel rightPixel = null;
    int width = pixels[0].length;
    for (int row = 0; row < pixels.length; row++)
    {
        for (int col = 0; col < width / 2; col++)
        {
            leftPixel = pixels[row][col];
            rightPixel = pixels[row][width - 1 - col];
            rightPixel.setColor(leftPixel.getColor());
        }
    }
}
    
```

Handwritten annotations in the code block:

- `pixels[0].length`: *height*
- `width / 2`: *height / 2*
- `width - 1 - col`: *height - 1 - row*
- Line `rightPixel = pixels[row][width - 1 - col];`: *bottom*
- Line `rightPixel.setColor(leftPixel.getColor());`: *bottom*



(1,2) → (4,5)    (6,6)

```

for (int row = 0; row < pixels.length - 1; row++)
for (int col = 0; col < pixels[0].length - 1 - row; col++)
{
    Pixel fromPixel = pixels[row][col];
    Pixel toPixel = pixels[pixels.length - 1 - col][pixels[0].length - 1 - row];
    toPixel.setColor(fromPixel.getColor());
}
    
```