Section 12: Images

Exercise Solutions:

1) Write out a short Processing program below that loads an image called pic.png from the project folder and completely covers a drawing canvas of size $300 \times 500$.

```java
PImage myImg;
void setup() {
    size(300,500);
    myImg = loadImage("pic.png");
}
void draw() {
    image(myImg,0,0,300,500);
}
```

2) Describe what does the following code does. At what point will this program run into an error?

```java
void setup() {
    size(200,100);
}
void draw() {
    loadPixels();
    pixels[frameCount] = color(0,255,0);
    updatePixels();
}
```

Every frame, it will turn one pixel of the drawing canvas green, starting in the upper-left corner and moving right first and then down.

It will run into an error when it reaches the end of the `pixels[]` array. The length of `pixels[]` is determined by the canvas size and in this program there are $200 \times 100 = 20,000$ pixels, so we will hit an error on frame 20,000.