Chapter 1 : Color

Exercise P.1.0

Step 1:
In this exercise we will be changing the color and size by moving the mouse. We begin this exercise with the setup function. Here with set the canvas size to 720 x 720. We also give it no cursor . This hides the cursor from view. I also set the color mode to HSB(Hue, Saturation & Brightness). The three values after HSB specify the range of the HSB, with 360 being the full spectrum for hue. The rectangle is centred with no stroke.

```
function setup() {
   createCanvas(720, 720);
   noCursor();

   colorMode(HSB, 360, 100, 100);
   rectMode(CENTER);
   noStroke();
}
```

Step 2:
We then must use the draw function. Here we divide the y value by 2 to get values between 0 and 360 on the color wheel. The y value is then subtracted from 360 to get values between 360 and 0.

```
function draw() {
  background(mouseY / 2, 100, 100);

  fill(360 - mouseY / 2, 100, 100);
  rect(360, 360, mouseX + 1, mouseX + 1);
}
```

Step 3:
The final step is to create a timestamp for the image using the keyPressed function. This will save whatever's on the canvas when the key of 's' is pressed and will give you a timestamp.

```
function draw() {
  background(mouseY / 2, 100, 100);

  fill(360 - mouseY / 2, 100, 100);
  rect(360, 360, mouseX + 1, mouseX + 1);
}
```