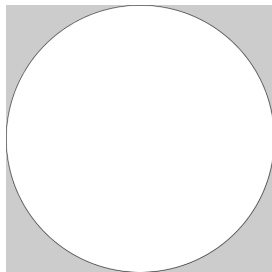


Your Name:

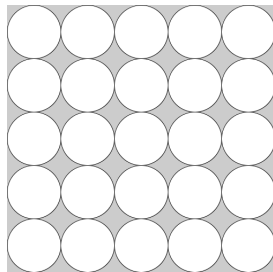
Lab#8: Week of Nov 9, 2020

Due by midnight on Nov 13, 2020.

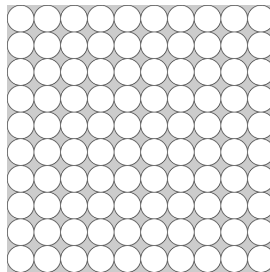
Question 1. Write a function that creates a NxN grid of ellipses. Your function should take N as a parameter and use the canvas `width` and `height`. Call your function from `setup()`. Below are examples of running your program with different values of N.



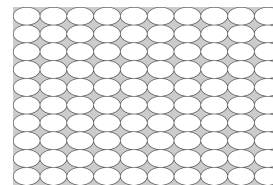
N = 1 (500x500)



N = 5 (500x500)



N = 10 (500x500)

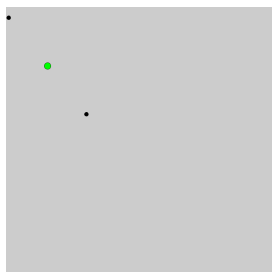


N = 10 (600x400)

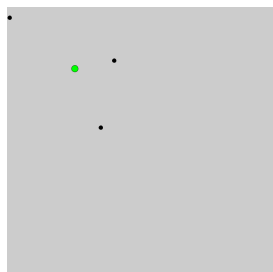
Question 2. Write a function that computes the average coordinate from a list of coordinates. For this question, we will load the coordinates from a file. Each line of the file contains an x,y coordinate (separated by a comma). For example, the following file has two points.

```
10,40
300,400
```

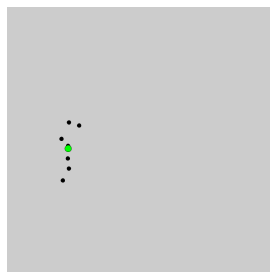
Your program should load the list of points and display them on a 1000,1000 pixel canvas. You should then compute and display the average coordinate. The average x-coordinate will be the sum of all the x-coordinates, divided by the number of points. Same for y: the average y-coordinate will be the sum of all the y-coordinates, divided by the number of points.



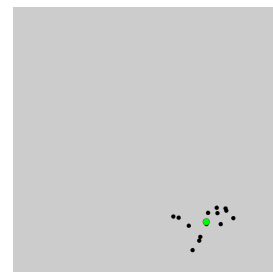
twoPoints.txt



threePoints.txt



BigDipper.txt



Cygnets.txt

When the number of points is two, the average should be exactly between the two points. When the number is three, the average should be inside the triangle. For any number, the average should be inside the bounds containing all the points.