Assignment Requirements:
Khan Academy offers a sample Paddle Ball game:
https://www.khanacademy.org/computer-programming/paddle-ball/830543654
Your task in this assignment is to make a number of improvements to Khan Academy’s basic Paddle Ball game.

Grading Rubric [20 points total]:

Note: To earn any of the points below, your game must work with all the functionality as in the given Paddle Ball game: the ball bounces of the west, north and east walls and the paddle, the paddle moves with user input controls (the given game uses mouse, but you can change that to keyboard if you want) and the game ends when the ball goes off the south edge.

[1 point]: Attach one file in Blackboard with the file name: CS105_Lab4_yourFirstName.yourLastName.html.

[Board Size: 3 points]: Like all Khan Academy examples, the canvas is 400x400. You need to increase this to 900 x 600 pixels. Note: In 2017, the most common laptop resolution is 1366 x 768. Creating a 900 x 600 pixel canvas leaves plenty of space for the browser’s boarders. Full HD is 1920 x 1080. This is the resolution of higher end laptops.

[Score: 4 points]: Your program must add the concept of a “game” that has three balls (one at a time). For each game of 3 balls, your program must count and display the number of paddle hits the player has made.

[Ball Speed: 4 points]: When the number of paddle hits in a game is small the ball moves slowly so that the game is quite easy (you decide how slow the ball moves at the start of a game). After the player has scored a few hits, speed the ball up a small amount (you decide how fast). For a high number of hits, the ball should move fast enough to be a challenge to a very good video game player (but not so fast that a good player just cannot play at the fastest level). The game must have at least 5 different ball speed levels.
[Paddle Size: 4 points]: When a game starts, the paddle must be about 2x the size of the Khan Academy paddle. As the player scores more hits, the paddle must get smaller. As with the ball speed, there must be at least 5 different paddle sizes. You choose how small the paddle gets and at what scores it gets smaller. The goal is that, together with the increasing ball speed, that the game is very easy in the beginning and hard, but not silly hard for very high scores.

[Polish: 4 points]: All good software needs polish, cool graphics, cool sound, the perfect balance of mechanics and skill, easy to learn rules and interface.... Add some polish to your game. This is only a 1 week project, so a truly polished app is not expected. We have not yet covered sound and it is not required that you have sound. However, if you want to add sound and can figure out how to do it, then that could be your polish. Alternatively, you could add cool background, ball and paddle images or particle effects on collisions or whatever you think of and want to do. Add something that makes the game uniquely yours.