COMP 160
Object-oriented Programming

Lab 3

Exercise 2: Simple Flappy Bird

- Draw Initial Scene: Use StdDraw methods to draw bird as a circle and obstacles as rectangles on the canvas

- Implement Bird Movement: Use user input ("space") to control the bird's movement. Update the bird's position accordingly.

- Handle Collision Detection: Check for collisions between the bird and obstacles. End the game if a collision is detected.

```java
double fallingConstant = 25;
int vertSpeed = 0;
int jumpSpeed = 30;
int ballSize = 10;
double x = 10, y = 200;
double vx = 20;
double dty = 0.1, dtx = 0.05;

int canvas_width = 800;
int canvas_height = 600;
StdDraw.setCanvasSize(canvas_width, canvas_height);
StdDraw.setXscale(0, canvas_width);
StdDraw.setYscale(0, canvas_height);
StdDraw.enableDoubleBuffering();
double[][] rectangles = {
        {300, 160, 50, 160},
        {300, 490, 50, 110},
        {650, 415, 50, 185},
        {650, 85, 50, 85}
};
```


Game Over!