Cannonball
Team Members: Gail Terman (4133) and Kyle Maguire (3564)

Game Concepts

You control a cannonball. The goal of the game is to reach the top of the cannon, jumping on slats and getting higher and higher. If you fall off the bottom of the screen the game ends and you lose. If you reach the top and fire the cannon, you win.

;; A Cannonball is a (make-cannonball x y velocity)
;; Where x and y are the position of the ball on the canvas
;; and velocity is the velocity of the cannonball.

;; A Slat is a (make-slat x y width)
;; Where x and y are the coordinates of the slat on the canvas
;; and width is how many pixels wide it is.

;; A Window is a (make-window y)
;; Where y is the y coordinate of the nw corner of the window

Key Events - Cannonball
   [-<] and [->] move the x coordinate of the cannon
   [Spacebar] or [^] launches the cannonball when on a platform
**Ticks** - *Cannonball*
- Moves a pixel in its current velocity
- Decreases the velocity

**Window**
- Reassesses y coordinate based on the cannonball’s coordinates

**Game Start**
At the start of the game, the cannonball rests on the floor of the game world, all the way at the bottom. Slats are placed randomly on the canvas going up all the way to the top, which is the end goal.

**Game End**
- When the ball reaches the top, the game ends, resulting in the player winning,
- When the ball falls off the bottom of the screen, the game ends, resulting in the player losing.

**Possible Extensions:**
- Add a points system, possibly gathering coins/tokens as you work your way up to the top.
- Add multiple levels to the game.