Arrays:

Enemies

* Containing location, type, hitpoints

Player

* Location, score

Bullets

* Location, direction, source

Obstacles

* Location, health

Subroutines

Initialization

* Background
* Draw player/enemies
* Start game
* Loop till enemies array is empty or player score <0
  + Done by win or lose condition flag
* Display victory or defeat

Game

* Player
  + Directional input / firing / start
    - Detect start first
    - Directional movement within some control structure
    - Firing detection outside control structure
  + Draw based on directional movement
    - Direction faced based on last movement
  + Draw based on fire button press
    - Add bullet to array and draw bullet
* Enemies
  + Pawn
    - Movement
      * random
    - Shooting
      * Direction facing
    - Dodging
  + Knight
    - Movement
      * random
    - Shooting
    - Dodging
  + Queen
    - Movement
      * random
    - Shooting
    - Dodging
* Obstacles
  + Draw obstacles
  + Shrink them when hit
* Score
  + Increase when enemies killed based on type
  + Decrease when user is hit with enemy bullets
  + Display victory or defeat depending on if all enemies killed or score < 0