Logic for the boss

* While bossPhase == 1
  + //Attack 1A -Fireball Spread
  + If (aPhase = 1 and timer3 >= 60)
    - timer 3 = 0, timer3On = false
    - if random(0.0, 2.0) < 1.0
      * set fireballs 0-2 to fire downwards in spread
      * animate them, set dead to false, move to boss
    - else
      * set fireballs 0-1 to fire downwards in smaller spread
      * otherwise same as first outcome
  + //Attack 1B -Drop Rocket
  + If (aPhase = 2 and timer3 >= 60)
    - timer 3 = 0, timer3On = false
    - if (random(0.0, 2.0) < 1.0)
      * if (hand1 is alive)
        + spawn drop rocketLeft at hand 1's XY, set to not dead
        + move it downwards slowly
      * else
        + spawn drop rocketRight at hand 2's XY, set to not dead
        + move it downwards slowly
    - else
      * if (hand2 is alive)
        + spawn drop rocketRight at hand 2's XY, set to not dead
        + move it downwards slowly
      * else
        + spawn drop rocketLeftt at hand 1's XY, set to not dead
        + move it downwards slowly
* If (bossPhase == 1 and both hand1 and hand2 are dead)
  + Set frame sequence of boss1 to animate from frame 1 to 7
  + Set it's speed to move right
  + Set bossPhase to 2
  + timer 3 = 0;
* When boss1 frame is 7
  + timer3on = true
* While bossPhase == 2
  + //Attack 2A -Drop Rocket EX
  + If (aPhase = 1 and timer3 >= 60)
    - timer 3 = 0, timer3On = false
    - timer 4 = 0, timer4On = true
    - if random(0.0, 2.0) < 1.0 //Fire right
      * set image to frame 9
    - else
      * set image to frame 8
  + if (aPhase = 1 and timer4 >= 30)
    - timer 4 = 0, timer4On = false
    - If frame is frame 8
      * spawn rocketLeft, have it fall fast
    - else
      * spawn rocketRight, have it fall fast
    - set image to frame 0
  + //Attack 2B -Fireball Cannon
  + If (aPhase = 2 and timer3 >= 60)
    - timer 3 = 0, timer3On = false
    - move all three fireballs to location
    - fire all three towards ship at different speeds
  + //Attack 2C -Bounce Beam
  + If (aPhase = 3 and timer3 >= 60)
    - timer 3 = 0, timer3On = false
    - move bounce beam 0 and 1 to position, fire at alternate wide angles.
* If (bossPhase == 2 and boss health <= ½ total health)
  + //Play Transform Sequence
  + set boss1 to dead
  + set boss2 to alive, and move to position
  + animate sprite from frame 2 to 17
  + timer 3 = 0;
* When boss2 frame is 17
  + timer3on = true
* While bossPhase == 3
  + //Attack 3A -Hex Minion
  + If (aPhase = 1 and timer3 >= 60)
    - timer 3 = 0, timer3On = false
    - call reset minion function, call for only 2 rows.
  + //Attack 3B -Rabbit Rocket
  + If (aPhase = 2 and timer3 >= 60)
    - timer 3 = 0, timer3On = false
    - spawn rabbit rocket (it handles the rest of logic)
  + //Attack 3C -Tortoise Torpedo
  + If (aPhase = 2 and timer3 >= 60)
    - timer 3 = 0, timer3On = false
    - spawn tortoise rocket (it handles the rest of logic)
  + //Attack 3D -Letter Lock
    - LETTERS
* If (health <= 0 and bossPhase == either 3 or 4)
  + timer 3 on = true
  + timer4 on = true
  + if bossPhase == 3
    - animate between sprite 1 and 2
    - timer 3 = 0
    - set motion to 0
  + bossPhase = 4
  + if timer4 >= 15
    - timer 4 = 0
    - spawn explosion animation at random location on body
  + if timer3 >= 120
    - set boss2 to dead
    - set bossPhase to 0
    - set gameOver to true

Logic Control For Boss attacks

* If bPhase == 1
  + if aPhase == 1 and all fireballs are dead
    - set aPhase = 2
    - start timer (timer3On = true)
  + else if aPhase == 2 and both rocketL and rocketR are dead
    - set aPhase = 1
    - start timer (timer3On = true)
* Else if bPhase == 2
  + if aPhase == 1 and both rocketL and RocketR are dead
    - set aPhase = 2
    - start timer
  + else if aPhase == 2 and all fireballs are dead
    - set aPhase = 3
    - start timer
  + else if aPhase == 3 and both wave beams are dead
    - set aPhase = 1
    - start timer
* Else if bPhase == 3
  + if aPhase == 1
    - set aPhase = 2
    - start timer
  + else if aPhase == 2 and Rabbit Rocket is dead
    - set aPhase = 3
    - start timer
  + else if aPhase == 3 and Tortoise is dead
    - set aPhase = 4
    - start timer
  + else if aPhase == 4 and (letter dead function) returns true)
    - set aPhase = 1
    - start timer