* + - * x\_1: # of circles on the board
      * x\_2: # of crosses on the board
      * x\_3: # of circle rows on the board
      * x\_4: # of cross rows on the board
      * X\_5 # of spots filled on the board
      * # of corners

V(b) = w\_0 + w\_1(x\_1) + w\_2(x\_2) + w\_3(x\_3) + w\_4(x\_4)

if there is horizontal OR vertical OR diagonal row of circles:

Circle player has won

if there is horizontal OR vertical OR diagonal row of crosses:

Cross player has won

If b is a winning board state V(b) = 100

If b is a losing board state V(b) = -100

If b is a tied board state V(b) = 0

* + - For each training example (b, Vtrain(b)) {
      * use the current weights to compute V-hat(b)
      * for each eight wᵢ, update it as {
        + wᵢ ← wᵢ + n \* (Vtrain(b) - V-hat(b)) \* xᵢ