1. 1. {\* and w contains at most n a’s}
      1. Adv chooses p
      2. You choose a string w =
      3. Adv splits w into pieces w=xyz, |xy| ≤ p, |y| > 0
      4. You choose i=n, thus y = p = n
      5. xy^0z ∉ A, set number of a’s to 0 so you never reach maximum or reach the only maximum of 0.
   2. {w {a,b}\* | the length of w is a square number}
      1. Adv chooses p
      2. You choose a string w = (a+b)^p
      3. Adv splits strings xyz where xyz = w, |xy| ≤ p, |y| > 0
      4. You choose i ≥ 0
      5. Choose a length n that is not square root-able into a whole number
   3. {w {a,b}\* | w ≠ rev(w)}
      1. Adv chooses p
      2. You choose a string w = b
      3. Adv splits strings xyz where xyz = w, |xy| ≤ p, |y| > 0
      4. You choose i ≥ 0
      5. Increase i until the machine forgets from the string being too long
2. {w {a,b}\* | the kth to last char of w is b}
   1. 