Debugging APTs: Going green

- SandwichBar APT: from ideas to code to green
  
  ```python
  def whichOrder(available, orders):
      for idx, sand in enumerate(orders):
          ...
  ```

- CirclesCountry APT: from ideas to code to green
  
  ```python
  def leastBorders(x, y, r, x1, y1, x2, y2):
      count = 0
      for i, r in enumerate(r):
          ...
  ```

Question from previous Compsci 6

- Spec for format given, and the call
  
  ```python
  def findNames(list, year):
  ```

Revisiting cgratio APT

- 'cost' of finding likely sources of protein in DNA
  
  ```python
  def cgratio(strand):
      cg = 0
      for nuc in strand:
          if nuc == 'c' or nuc == 'g':
              cg += 1
      return cg
  ```

  ```python
  def maxIndex(strand, windowSize):
      index, max = 0, 0
      for i in range(len(strand) - windowSize + 1):
          cg = cgratio(strand[i:i+windowSize])
          if cg > max:
              max, index = cg, i
      return index
  ```

Revisiting cgratio APT

- 'cost' of finding likely sources of protein in DNA
  
  ```python
  def runningMax(strand, windowSize):
      gc, counters = 0, []
      for nuc in strand:
          if nuc == 'c' or nuc == 'g':
              gc += 1
          counters.append(gc)
      index, max = 0, 0
      for i in range(windowSize, len(strand) + 1):
          diff = counters[i] - counters[i - windowSize]
          if diff > max:
              max, index = diff, i
      return index - windowSize
  ```

names=["Jessica Chang: Feb 10, 1991",
"Leo Rofe: Aug 3, 1973",
"Chris Brown: May 14, 1991",
"Wayne Dark Light: Dec 25, 1985",
"Zhiyi Zhang: Nov 24, 1995"]