Analysis for recursive algorithm

1) Input size is =>n
2) Basic operation
   i. comparison
      1. length == 1
      2. branch1.max > branch2.max
      3. branch1.max < branch2.max
   ii. Assignment
      1. branch1 = birthdayCakeCandlesRecursive
   iii. add/subtract
      1. branch1.count + branch2.count
      2. index + new_length_part1
   iv. divide
      1. length / 2
3) Time complexity

   $T(n) = 2T(n/2) + \theta(1)$

   There are $n^{\log_2 2}=n^1$ leaves

   $f(n)=\theta(1)$

   $1<n^1$

   Master metod case 1

   Overall cost $\theta(n)$