**Week 3**

**6. Write a recursive version of linear search on an array of integers. What is the time complexity of the algorithm? Use the BigO notation to express it.**

Step 1: Star

Step 2: Read array [] = {1, 2, 3, 4, 5 }

Step 3: Here, target=1

Step 4: If target smaller than array [mid] then,

Step 5: return low + 1

Step 6: If target is greater than array [mid] then,

Step 7: return high – 1

Step 8: If the target is equal to array [mid] then,

Step 9: return mid

Step 10: Repeat from step 3 to step 9 until the given target is found

Step 11: End

* The complexity is 0(n) for the above algorithm.