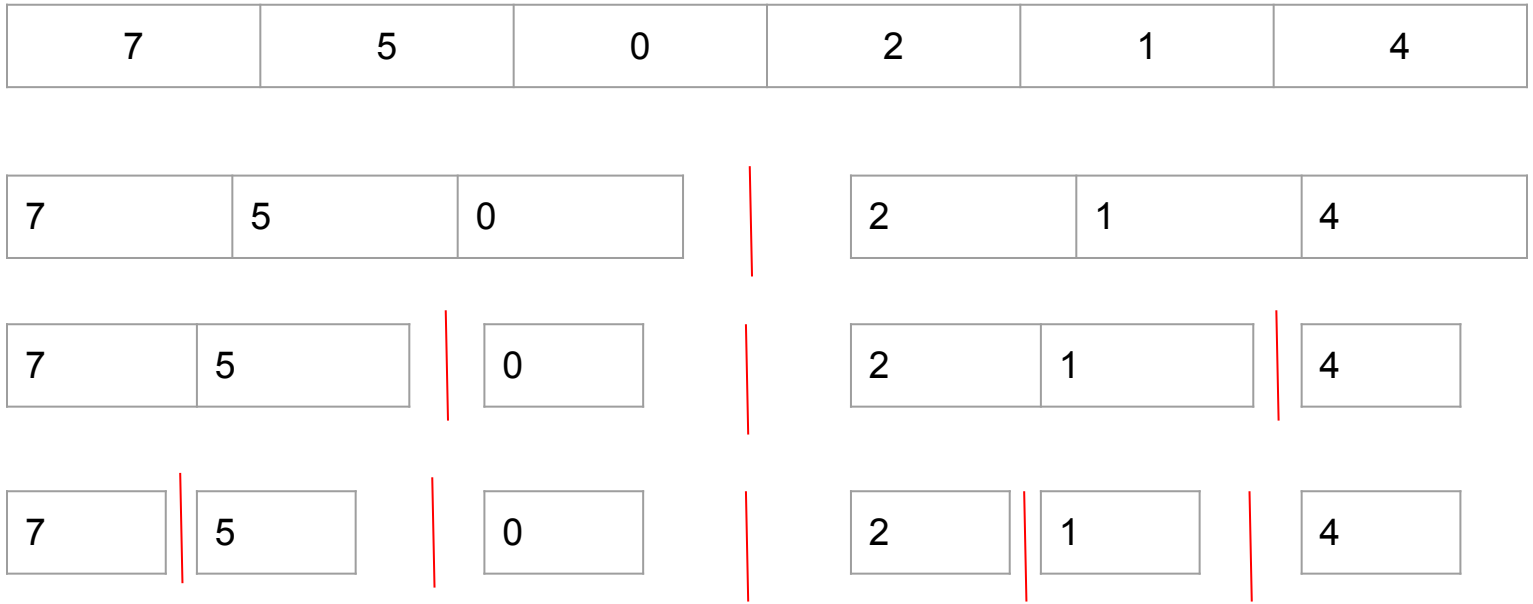
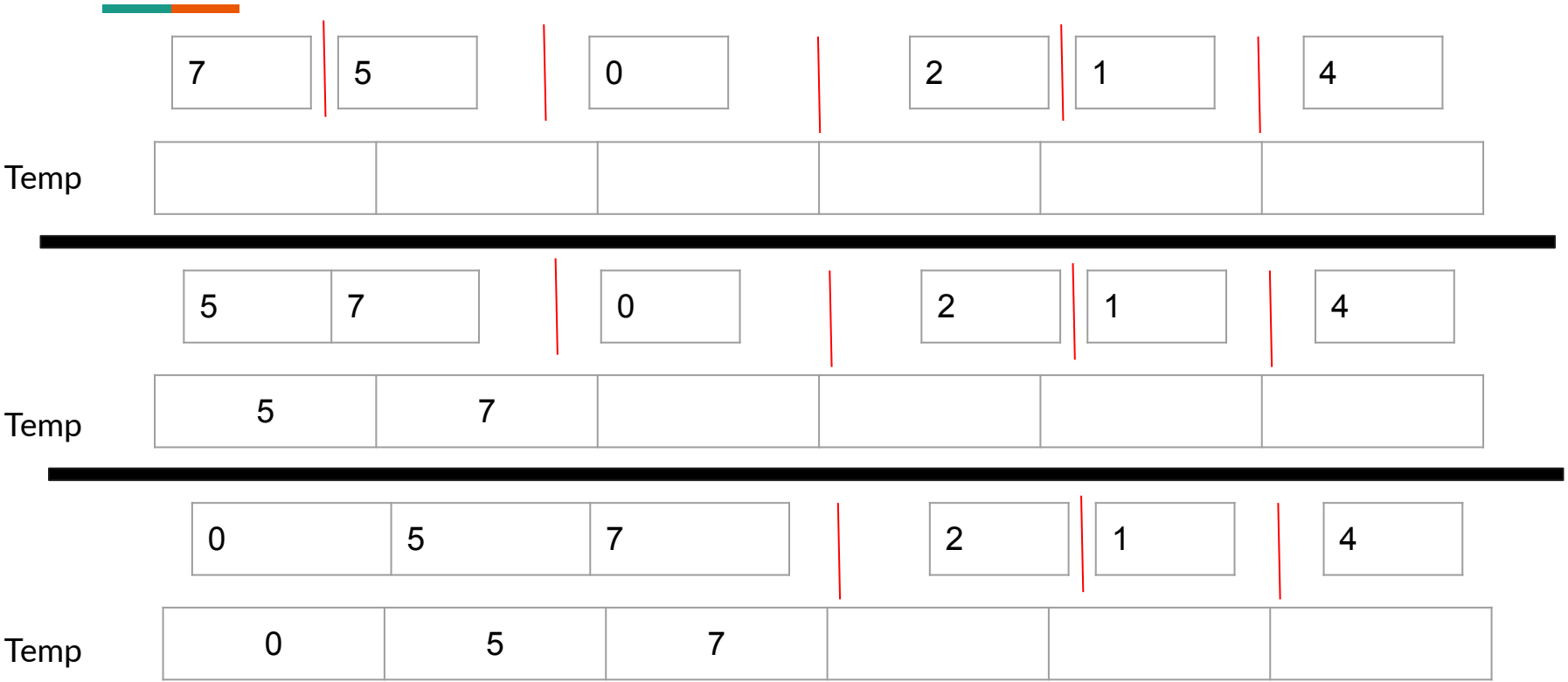
# Merge Sort

# Definition

- Merge sort is a computationally-efficient sorting algorithm known for its divide-and-conquer strategy
- It was developed by John von Neumann in 1945

# Example

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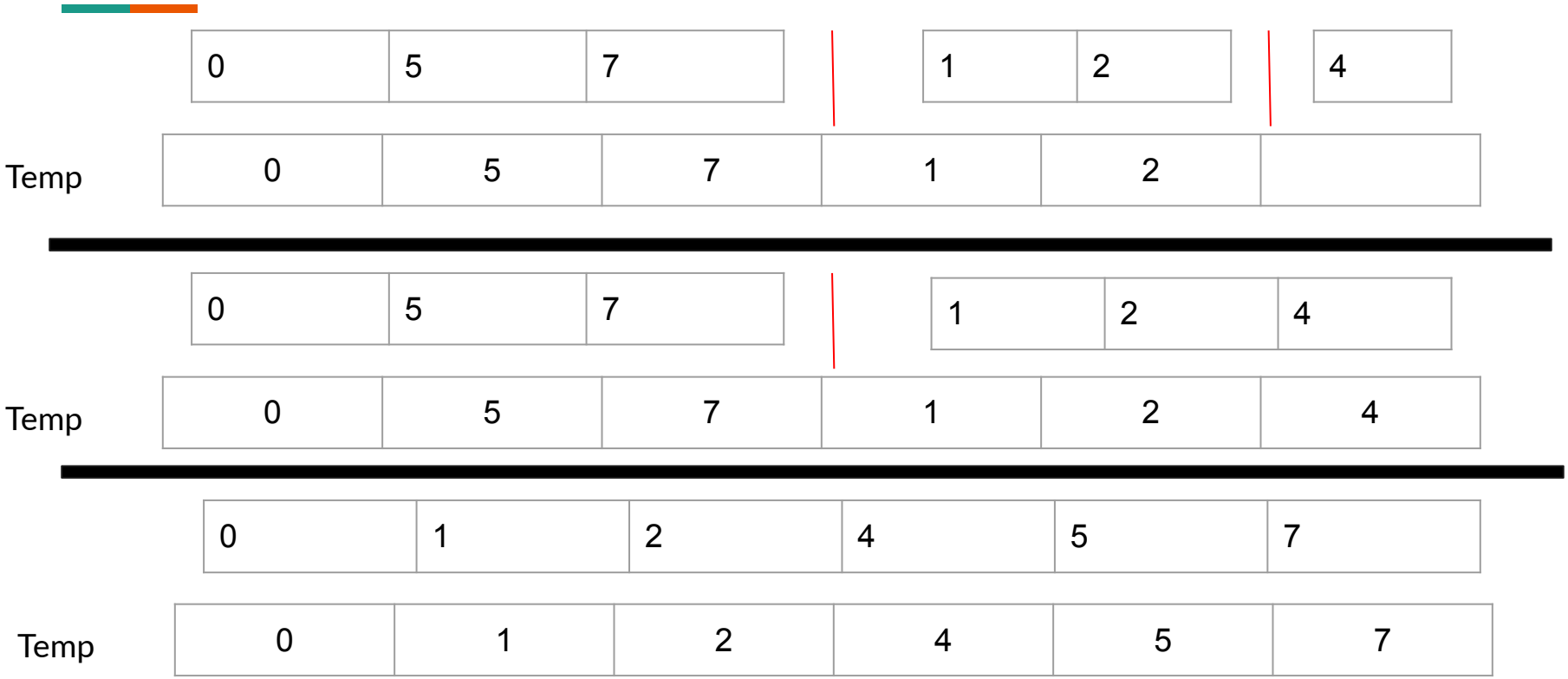
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# Main Takeaways

- The actually sorting occurs at the lowest levels when items are being copied into the temp array
- The time complexity of this algorithm if O(nlogn)
- The space complexity of this algorithm is O(n)

# Merge Sort Visualizer

- Merge Sort Simulator for extra help
  - https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/visualize/