

# Search-Sort Algorithms

---

1. Consider an array of integers: 2, 4, 5, 9, 11, 13, 14, 16

Draw out how the array would search for the value 16 using the **binary search** algorithm. Use the state of memory model, that is show a sectioned array body and indexes (deductions apply otherwise).

2. Consider an array of integers: 5, 11, 12, 9, 4, 8, 13

Draw out how the array would be sorted (showing each pass of the array using the **quick sort** algorithm. Note: **Use the middle element as the pivot**. Show sectioned array bodies and indexes (deductions apply otherwise).