

Easy-split / hard-join**Hard-split / easy-join****One
and
Many****Insertion sort**

Repeat for all items:

- take the physically next item from the unsorted part
- insert it into the sorted part in proper order

Selection sort

Repeat for all items:

- select the next item from the unsorted part by order
- insert it into the sorted part in the next physical spot

**Binary
Structure****Heap sort**

- add all items to a heap
- repeatedly take the smallest item (using deleteMin) and place it physically next

Tree sort

- insert all items into a BST
- traverse the tree in left-right inorder, placing each item physically next

**Half
and
Half****Merge sort**

- split the list physically into two halves
- recursively sort each half
- merge together by order, taking as needed

Quick sort

- split the list into two halves by order (smaller/larger)
- recursively sort each half
- merge together physically (place halves adjacent)