

(b). Sort the following list using selection sort. Each iteration, circle the two elements which are swapped.

```
int[] L = {20, 14, 7, 8};
```

To make the answer for this question clearer, assume we are using the following $O(N^2)$ algorithm for selection sort (no optimizations).

```
void selectionSort(int[] L) {
    for (int startIdx = 0; startIdx < L.length; startIdx++) {
        int minIdx = startIdx;
        for (int j = startIdx; j < L.length; j++) {
            if (L[j] < L[minIdx]) {
                minIdx = j;
            }
        }
        swap(startIdx, minIdx, L);
    }
}
```

20	14	7	8
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