QuickSort, ou Tri par Segmentation

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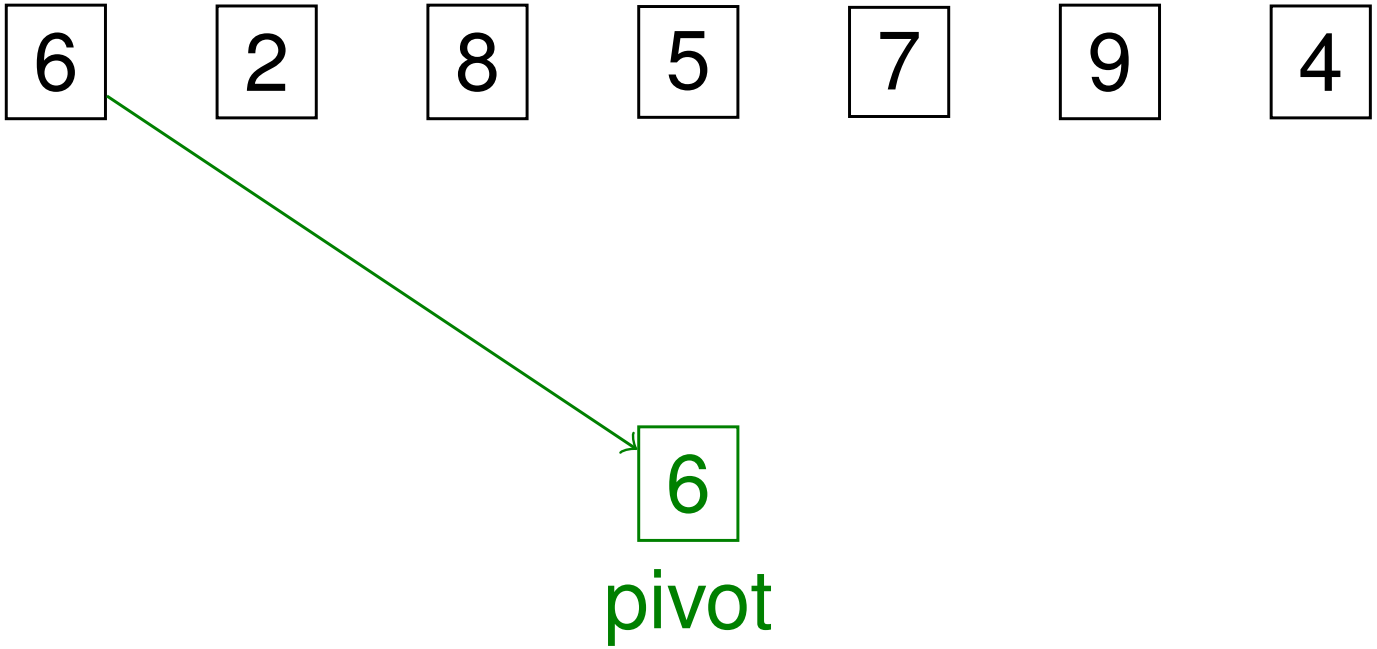

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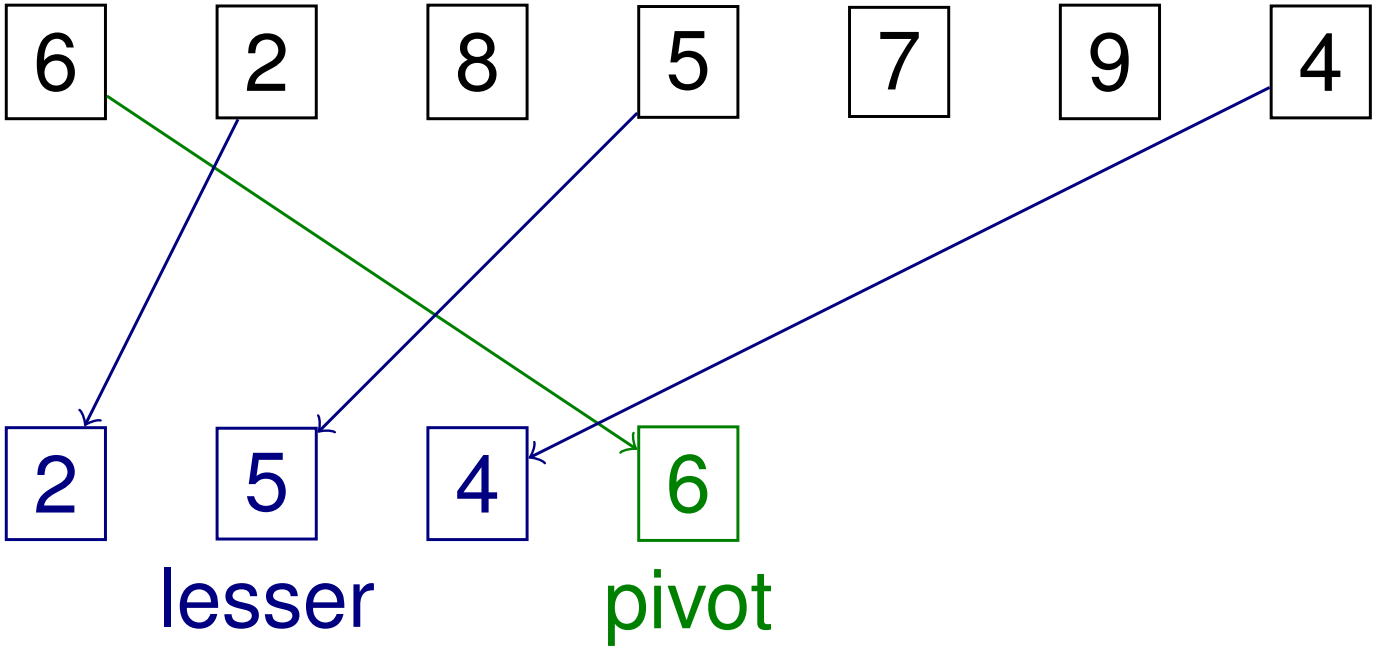

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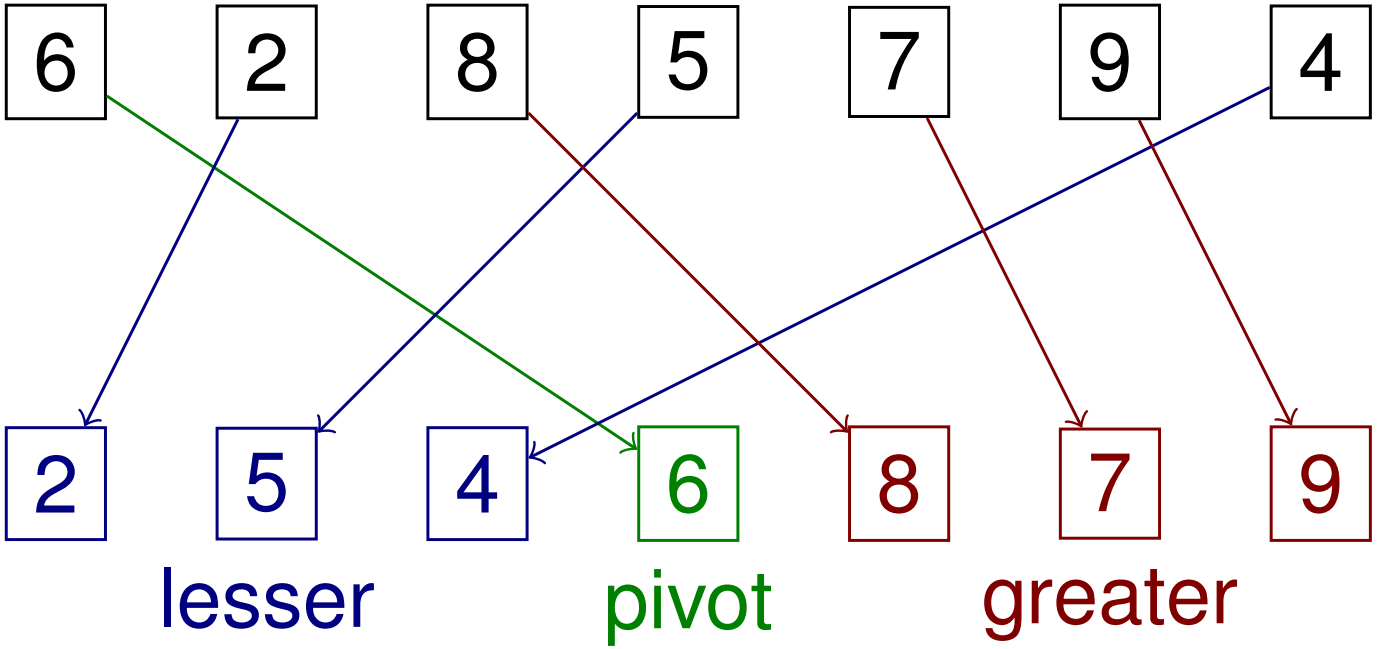

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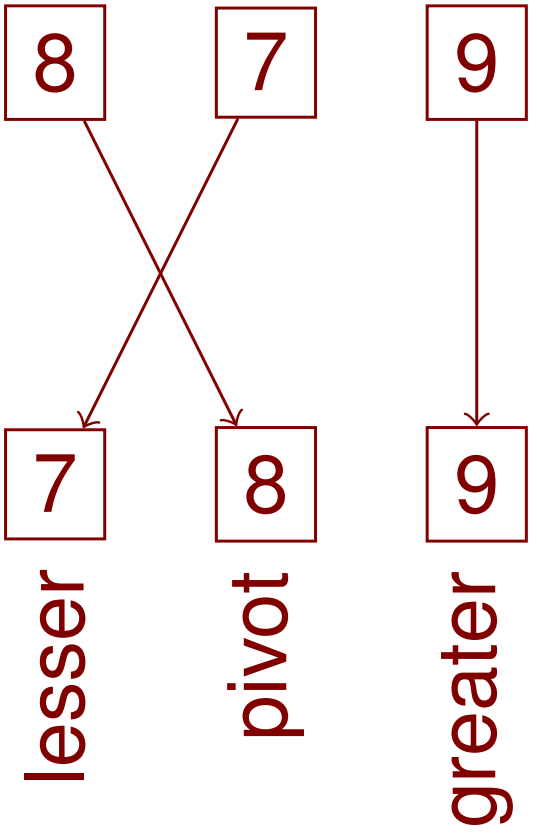

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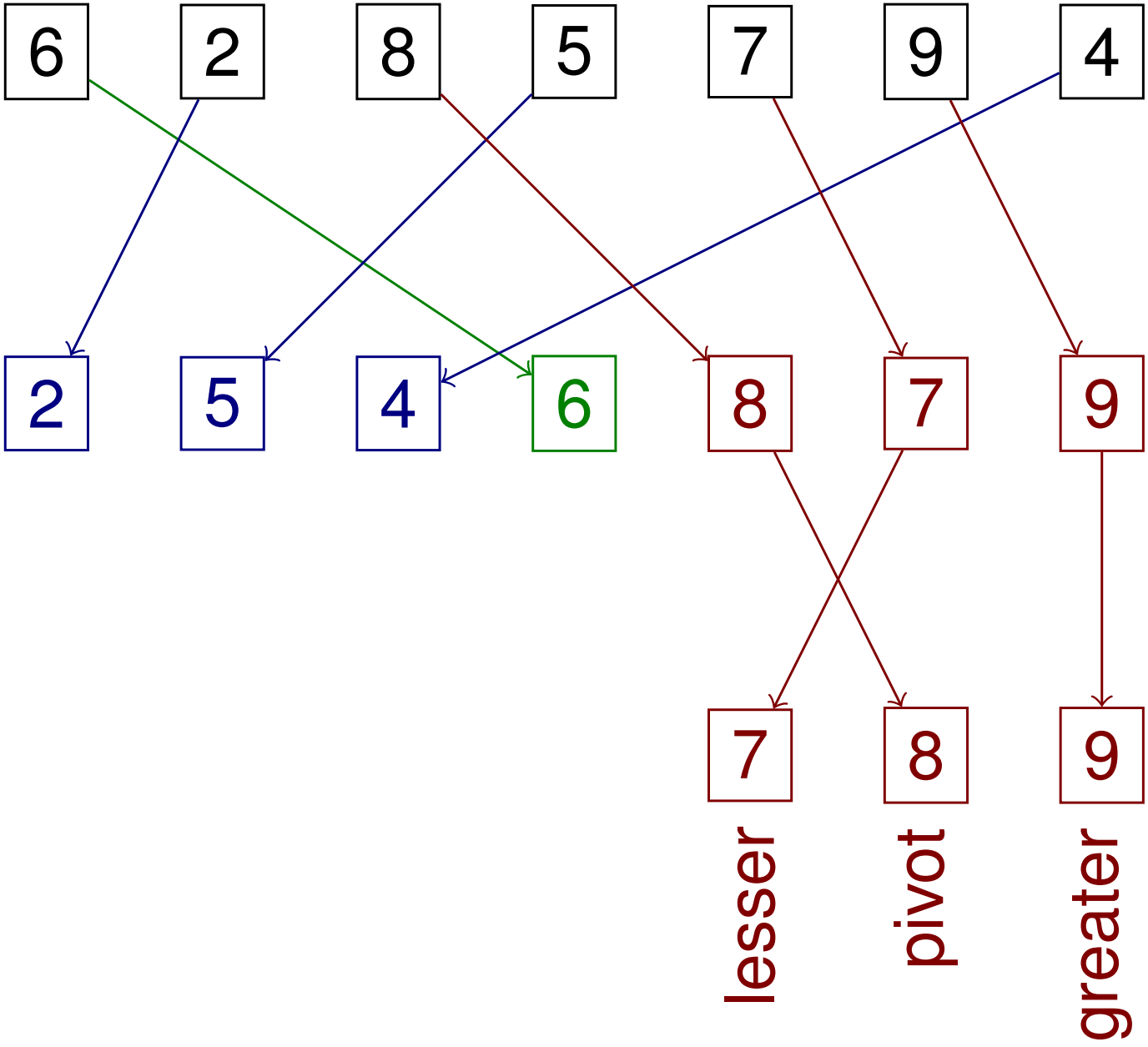

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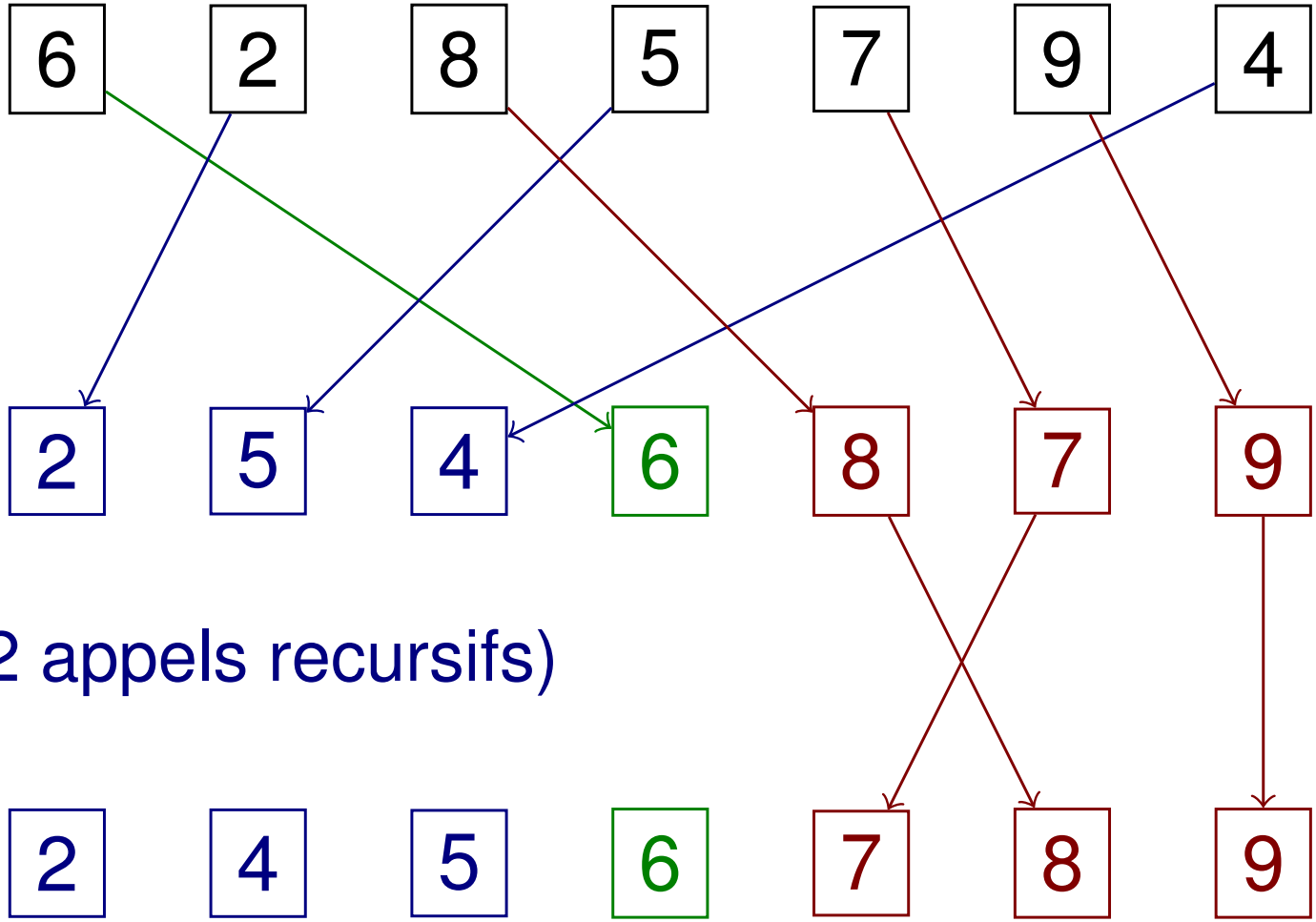

Principe de l'algorithme

- Choisir un pivot
- Extraire une liste `lesser` des éléments $<$ `pivot`
- Extraire une liste `greater` des éléments $\geq$ `pivot`
- Trier `lesser` et `greater`
- Concaténer `lesser`, le pivot, et `greater`

Une solution

```
def qsort(l):
    if l == []:
        # cas de base
        return []
    else:
        # recursion
        pivot = l[0]
        lesser = [x for x in l[1:] if x < pivot]
        greater = [x for x in l[1:] if x >= pivot]
        lesser_sorted = qsort(lesser)
        greater_sorted = qsort(greater)
        return (lesser_sorted +
                [pivot] +
                greater_sorted)
```