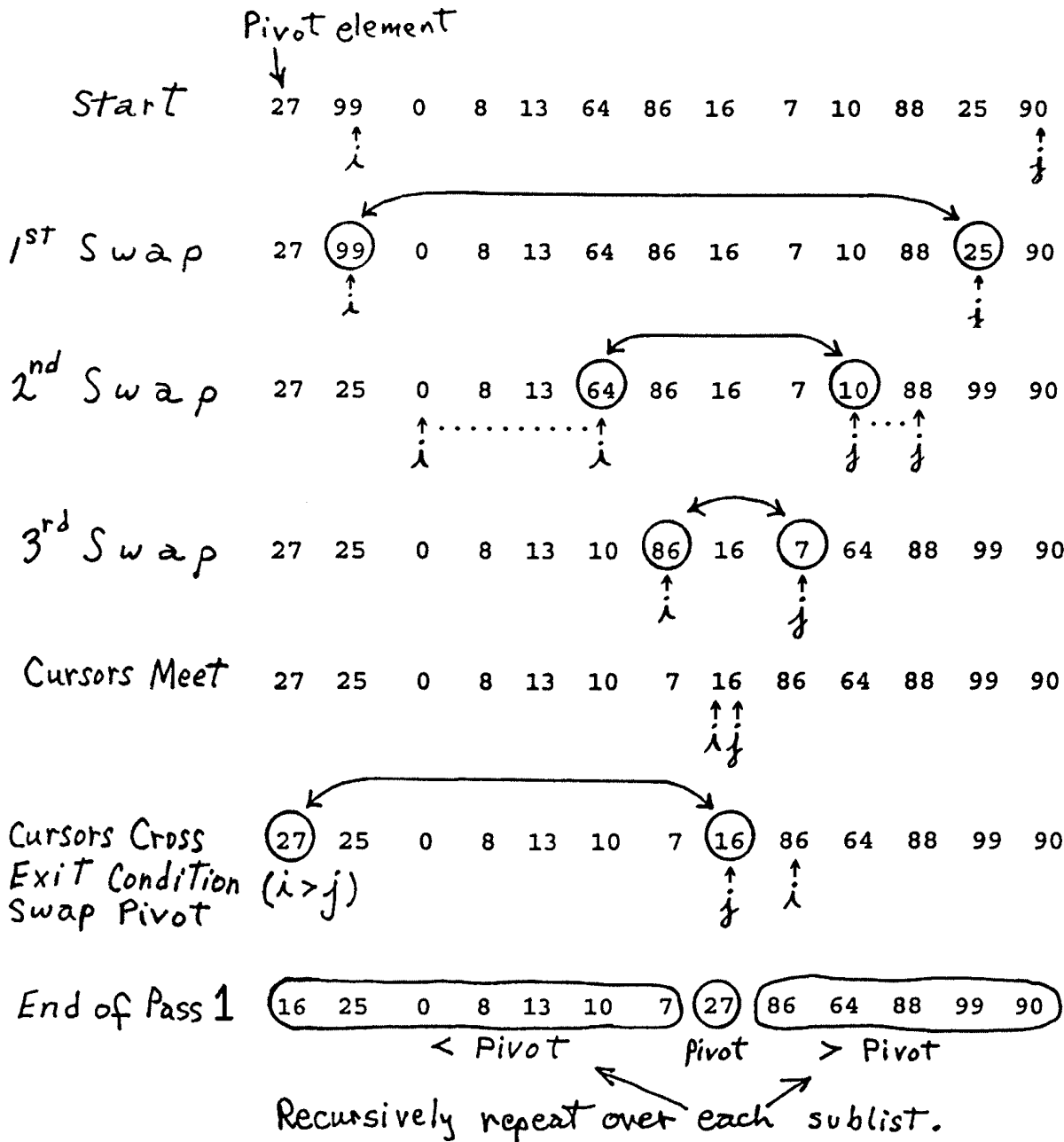


Quicksort Partitioning Snapshots



```
func partition(a, lo, hi)
  i = lo
  j = hi+1
  pivot = a[i]
  while true
    do i++ while a[i]<pivot
    do j-- while a[j]>pivot
    if i<j
      swap(a[i],a[j])
    else
      exit while-loop
    endif
  endwhile
  a[lo] = a[j]
  a[j] = pivot
  return j
endfunc
```

```
func quickSort(a, lo, hi)
  if lo < hi
    mid = partition(a, lo, hi)
    quickSort(a, lo, mid-1)
    quickSort(a, mid+1, hi)
  endif
endfunc
```