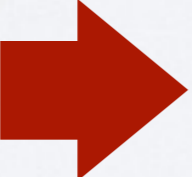
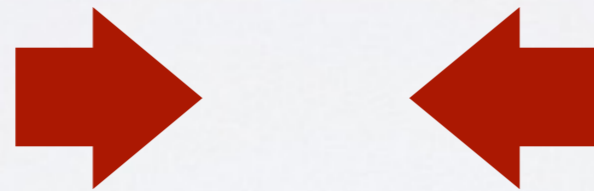


LOMUTO



If  \leq pivot, then swap

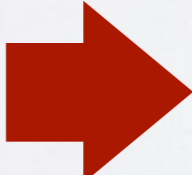
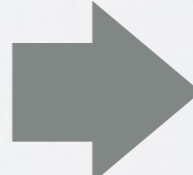
SEDCGEWICK

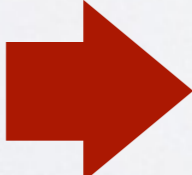



If  \geq pivot and  \leq pivot, then swap

DIJKSTRA







If  < pivot, then swap with  .

If  > pivot, then swap with  .

BENTLEY-MCILROY





If  $<$ pivot, then swap with  .

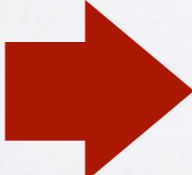

If  $>$ pivot, then swap with  .

If  $>$ pivot and  $<$ pivot, then swap

YAROSLAVSKIY



If  $< p$, then swap with  .

If  $> q$, then swap with  .