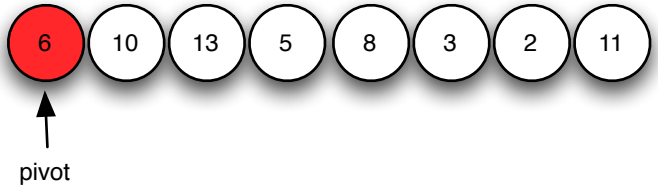
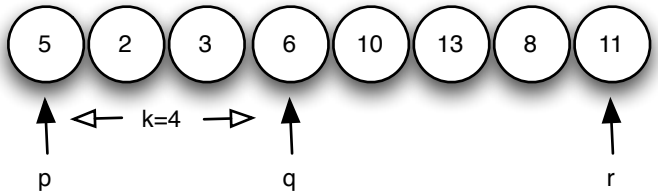
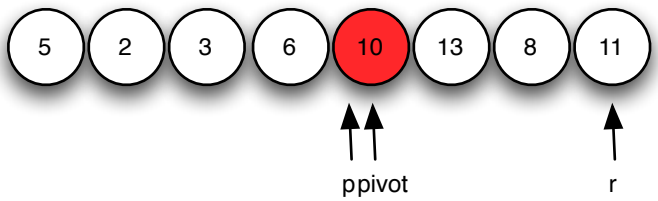
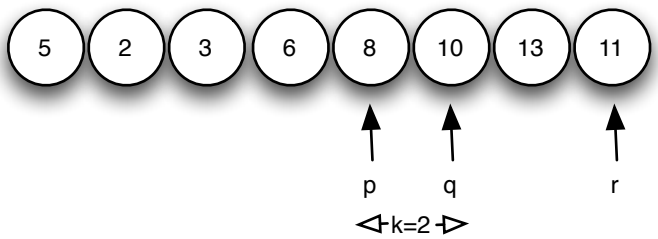
We are looking for the 7'th smallest element i.e i=7



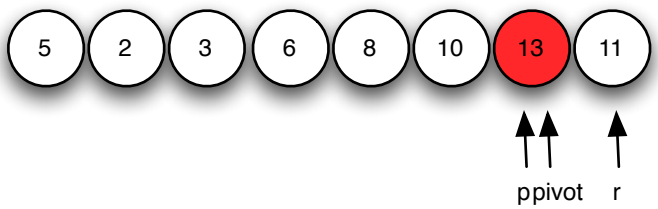


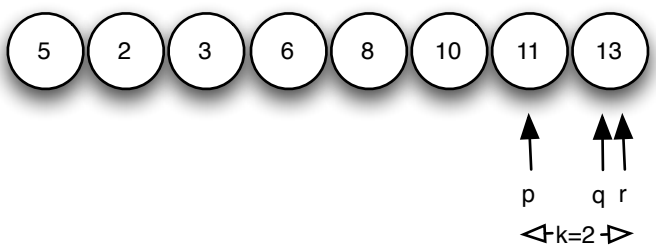
Since i>k we do a recursive call on the right side. i becomes i-k = 7-4 = 3



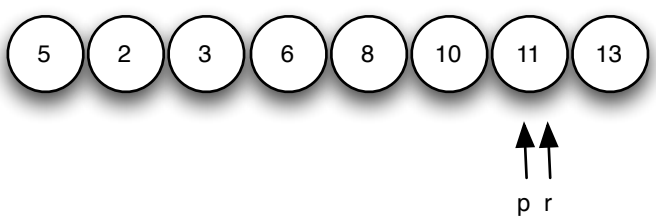


Since i>k we do a recursive call on the right side. i becomes i-k = 3-2 = 1





Since i<k we do a recursive call on the left side. i does not change



Since p==r the algorithm stops and returns 11