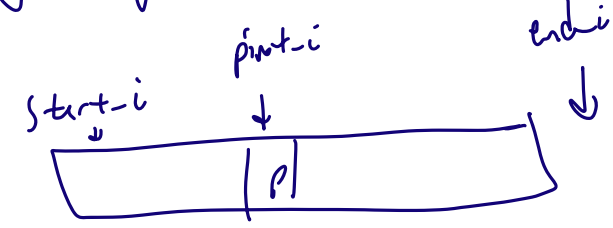
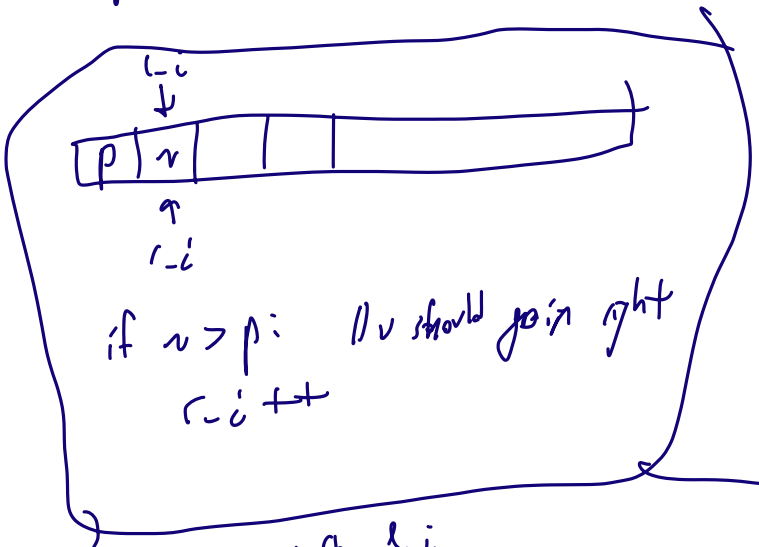
# Steps of Partition

0. beginning of algorithm

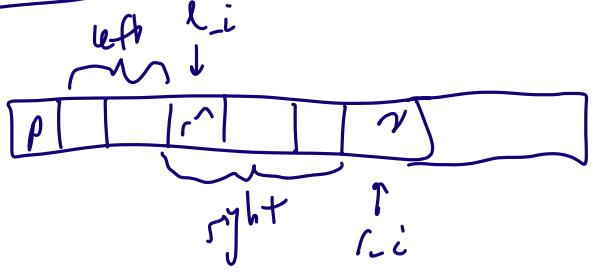



1. put pivot at beginning

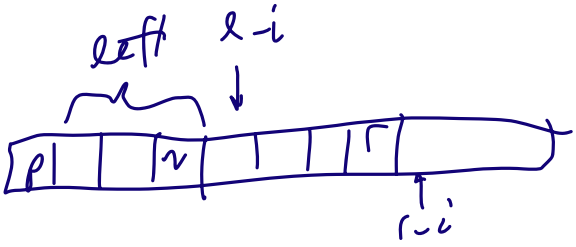
2. incorporate v into left or right



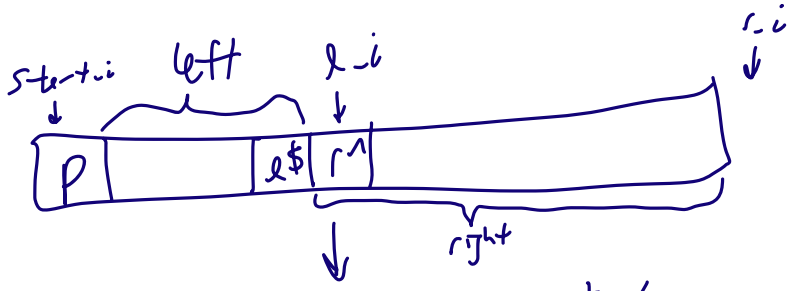

if v > p: // v should go in right
    r_i ++




if v < p: // v should go in left
    swap r^ and v (r^ is first element of right)
    l_i ++
    r_i ++



3. move first between l and r




swap p (left[start_i]) with l$ (left[l_i-1])