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1.) Data nilai = ^{0 1 2 3 4 5 6 7} 7, 45, 1, 255, 87, 45, 3, 9
berapakan urutan yg terjadi pada saat p=3
n = 8

start = 0

end = n - 1

= 8 - 1

= 7

Int pivot = data[end]

= data[7]

= 9

Int i = start - 1 = 0 - 1 = -1

for (j = [0] ; j <= [7])

j = 0

If (data[0] < pivot)

7 < 9 true

i = i + 1 = -1 + 1 = 0

t = data[0] → t = 7

data[i] = data[j]

data[0] = data[0] = 7

data = [7, 45, 1, 255, 87, 45, 3, 9]

j = 1

If (data[1] < pivot)

45 < 9 false (X)

j = 2

If (data[2] < pivot)

1 < 9 true

i = 0 + 1 = 1

t = data[1] → t = 45

data[i] = data[j]

data[1] = data[2] = data[1] = 1

data[1] = t → data[1] = 1

7, 1, 45, 255, 87, 45, 3, 9

j = 3

If (data[3] < pivot)

255 < 9 false (X)

j = 4

If (data[4] < pivot)

87 < 9 false (X)

j = 5

If (data[5] < pivot)

45 < 9 false (X)

j = 6

If (data[6] < pivot)

3 < 9 true

i = 1 + 1 = 2

t = data[2] → t = 45

data[i] = data[j]

data[2] = data[6]



data[2] = 3

data[2] = t \rightarrow data[2] = 3

7, 1, 3, 255, 87, 45, 45, 9

J = 7

If (data[7] < pivot)

9 < 3 false (x)

Int t = data[i+1]

t = [2+1] \rightarrow t = [3] \rightarrow t = 255

data[i+1] = data[end]

data[3] = data[7]

= 9

data[end] = t

data[7] = 255

return (i+1) \rightarrow return (2+1)

return 3

data = [7, 1, 3, 9, 87, 45, 45, 255]

P = 3 dari Return

data = [7, 1, 3, 9, 87, 45, 45, 255]

Start = 0

end = 3 - 1 = 2

Pivot = data[end] = data[2] = 3

i = 0 - 1 = -1

for (j = 0 ; j <= 2)

J = 0

If (data[0] < pivot)

7 < 3 false (x)

J = 1

If (data[1] < pivot)

1 < 3 false (x)

J = 2

If (data[2] < pivot)

3 < 3 false (x)

J = 3

If (data[3] < pivot)

9 < 3 false (x)

J = 4

If (data[4] < pivot)

87 < 3 false (x)

J = 5

If (data[5] < pivot)

45 < 3 false (x)

J = 6

If (data[6] < pivot)

45 < 3 false (x)

J = 7

If (data[7] < pivot)

255 < 3 false (x)

Int t = data[i+1]

t = data[-1+1]

t = data[0]

t = 7

data[i+1] = data[end]

data[0] = data[2]

data[0] = 3

data[end] = t \rightarrow data[2] = 7

return (-1+1) \rightarrow return (0)

data = [3, 1, 7, 9, 87, 45, 45, 255]

Jadi urutan yang terjadi saat P = 3 adalah :

data = [3, 1, 7, 9, 87, 45, 45, 255]

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