

Take element = Random

I am taking the Random element = 149

Step:-1

Pivot = 149

partition:

Left (< 149): 110 107 122 111 141 123 112 117
133

Right (\geq 149): 157 151

110 107 122 111 141 123 112 117 133 | 149 | 157
151

Step:-2

Pivot = 141 (Middle of the left subarray)

110 107 122 111 123 112 117 133 | 141 | 149
157 151

Step:-3

Pivot = 117 (Middle of the left subarray)

110 107 111 112 | 117 | 122 123 133 | 141 | 149 157
151

Step:-4

Pivot = 151 (Middle of the right subarray)

110 107 | 111 112 | 117 | 122 123 133 | 141 | 149
151 157

Final Sorted array

107 110 111 112 117 122 123 133 141
149 151 157