

## → Selection Sort ✓

[3, 44, 38, 5, 47, 15, 36, 26, 27, 2, 46, 4, 19, 50, 48, 43, 33, 34, 25, 1]

① First pass :-

"value used to compare = 3"

"values to be swap =  $3 \rightleftharpoons 1$ "

[1, 44, 38, 5, 47, 15, 36, 26, 27, 2, 46, 4, 19, 50, 48, 43, 33, 34, 25, 3]

② Second pass :-

"value used to compare = 44"

"values to be swap =  $44 \rightleftharpoons 2$ "

[1, 2, 38, 5, 47, 15, 36, 26, 27, 44, 46, 4, 19, 50, 48, 43, 33, 34, 25, 3]

③ Third pass :-

"value used to compare = 38"

"values to be swap =  $38 \rightleftharpoons 3$ "

[1, 2, 3, 5, 47, 15, 36, 26, 27, 44, 46, 4, 19, 50, 48, 43, 33, 34, 25, 38]

④ Fourth pass :-

"value used to compare = 5"

"values to be swap =  $5 \rightleftharpoons 4$ "

[1, 2, 3, 4, 47, 15, 36, 26, 27, 44, 46, 5, 19, 50, 48, 43, 33, 34, 25, 38]



②

⑤ Fifth pass:-

"value used to compare = 47"

"values to be swap =  $47 \rightleftharpoons 5$ "

[1, 2, 3, 4, 5, 15, 36, 26, 27, 44, 46, 47, 19, 50, 48, 43, 33, 34, 25, 38]

⑥ Sixth pass:-

"value used to compare = 15"

"values to be swap = no swapping"

[1, 2, 3, 4, 5, 15, 36, 26, 27, 44, 46, 47, 19, 50, 48, 43, 33, 34, 25, 38]

⑦ Seventh pass:-

"value used to compare = 36"

"values to be swap =  $36 \rightleftharpoons 19$ "

[1, 2, 3, 4, 5, 15, 19, 26, 27, 44, 46, 47, 36, 50, 48, 43, 33, 34, 25, 38]

⑧ Eighth pass:-

"value used to compare = 26"

"values to be swap =  $26 \rightleftharpoons 25$ "

[1, 2, 3, 4, 5, 15, 19, 25, 27, 44, 46, 47, 36, 50, 48, 43, 33, 34, 26, 38]

⑨ Ninth pass:-

"value used to compare = 27"

"values to be swap =  $27 \rightleftharpoons 26$ "

[1, 2, 3, 4, 5, 15, 19, 25, 26, 44, 46, 47, 36, 50, 48, 43, 33, 34, 27, 38]

③

⑩ Tenth pass :-

"value used to compare = 44"

"values to be swap =  $44 \rightleftharpoons 27$ "

[1, 2, 3, 4, 5, 15, 19, 25, 26, 27, 46, 47, 36, 50, 48, 43, 33, 34, 44, 38]

⑪ Eleventh pass :-

"value used to compare = 46"

"value to be swap =  $46 \rightleftharpoons 33$ "

[1, 2, 3, 4, 5, 15, 19, 25, 26, 27, 33, 47, 36, 50, 48, 43, 46, 34, 44, 38]

⑫ Twelfth pass :-

"value used to compare = 47"

"values to be swap =  $47 \rightleftharpoons 34$ "

[1, 2, 3, 4, 5, 15, 19, 25, 26, 27, 33, 34, 36, 50, 48, 43, 46, 47, 44, 38]

⑬ Thirteenth pass :-

"value used to compare = 36"

"values to be swap = no change"

[1, 2, 3, 4, 5, 15, 19, 25, 26, 27, 33, 34, 36, 50, 48, 43, 46, 47, 44, 38]

⑭ Fourteenth pass :-

"value used to compare = 50"

"values to be swap =  $50 \rightleftharpoons 38$ "

[1, 2, 3, 4, 5, 15, 19, 25, 26, 27, 33, 34, 36, 38, 48, 43, 46, 47, 44, 50]



(4)

⑮ fifteenth pass:-

"value used to compare = 48"

"values to be swap =  $48 \geq 43$ "

[1, 2, 3, 4, 5, 15, 19, 25, 26, 27, 33, 34, 36, 38, 43, 48, 46, 47, 44, 50]

⑯ Sixteenth pass:-

"value used to compare = 48"

"values to be swap =  $48 \geq 44$ "

[1, 2, 3, 4, 5, 15, 19, 25, 26, 27, 33, 34, 36, 38, 43, 44, 46, 47, 48, 50]

⑰ Seventeenth pass:-

"value used to compare = 46"

"values to be swap = no change"

[1, 2, 3, 4, 5, 15, 19, 25, 26, 27, 33, 34, 36, 38, 43, 44, 46, 47, 48, 50]

⑱ Eighteenth pass:-

"value used to compare = 47"

"values to be swap = no change"

[1, 2, 3, 4, 5, 15, 19, 25, 26, 27, 33, 34, 36, 38, 43, 44, 46, 47, 48, 50]

⑤

⑱ Nineteenth pass :-

"value used to compare = 48"

"values to be swap = no change"

[1, 2, 3, 4, 5, 15, 19, 25, 26, 27, 33, 34, 36, 38, 43, 44, 46, 47, 48, 50]

⑳ Twentieth pass :-

"value used to compare = 50"

"values to be swap = no change"

[1, 2, 3, 4, 5, 15, 19, 25, 26, 27, 33, 34, 36, 38, 43, 44, 46, 47, 48, 50]

2) Sorted array :-

[1, 2, 3, 4, 5, 15, 19, 25, 26, 27, 33, 34,  
36, 38, 43, 44, 46, 47, 48, 50]