Average Case

🟡 = sorted portion

$i-1 > i$

20	1	12	7	3
0	1	2	3	4

→

20	1	12	7	3

20	1	12	7	3

swap

→

1	20	12	7	3

1	20	12	7	3

→

1	12	20	7	3

1	12	20	7	3

→
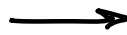
1	7	12	20	3

not a single swap

1	7	12	20	3

→
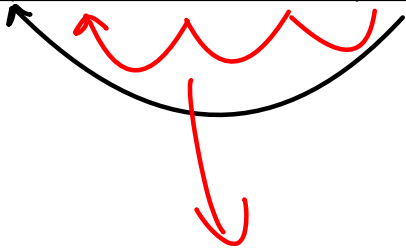
1	3	7	12	20

multiple swaps through sorted portion

Worst Case (n = 5)
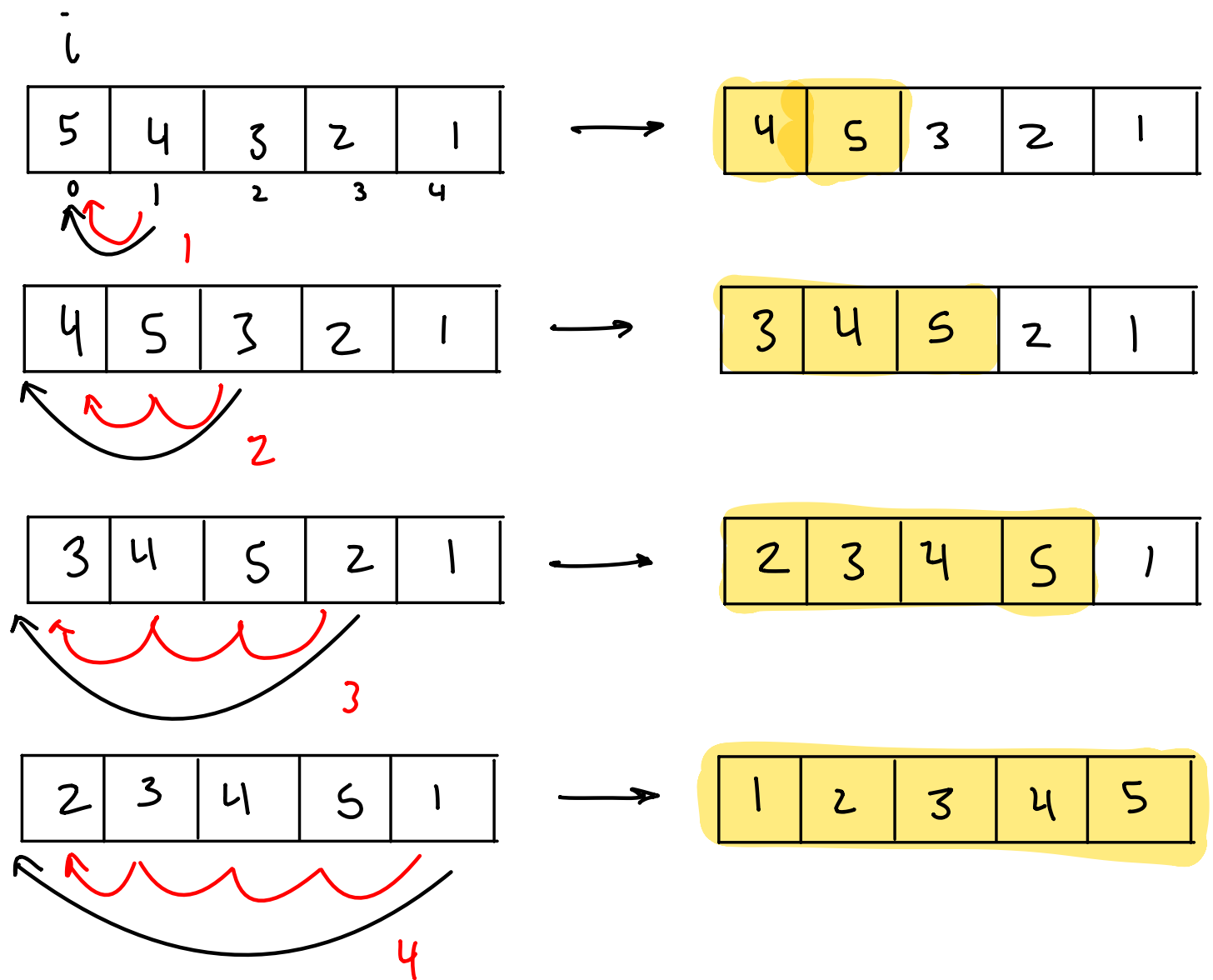
Totals:

Comparisons: $1 + 2 + 3 + 4 = 10$

Swaps: $1 + 2 + 3 + 4 = 10$

Total operations: $10 + 10 = 20$