Bubble Sort

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Iteration 1:

[0]	[1]	[2]	[3]	[4]	[5]
30	20	60	50	10	40

pos Pos+1

30 > 20 ? Yes
swap

[0]	[1]	[2]	[3]	[4]	[5]
20	30	60	50	10	40

pos Pos+1

30 > 60 ? no

[0]	[1]	[2]	[3]	[4]	[5]
20	30	60	50	10	40

pos Pos+1

60 > 50 ? Yes
swap

[0]	[1]	[2]	[3]	[4]	[5]
20	30	50	60	10	40

pos Pos+1

60 > 10 ? Yes
swap

[0]	[1]	[2]	[3]	[4]	[5]
20	30	50	10	60	40

pos Pos+1

60 > 40 ? Yes
swap

[0]	[1]	[2]	[3]	[4]	[5]
20	30	50	10	40	60

Iteration 2:

[0]	[1]	[2]	[3]	[4]	[5]
20	30	50	10	40	60

pos Pos+1

Arr[pos] > arr[pos+1] ? no

[0]	[1]	[2]	[3]	[4]	[5]
20	30	50	10	40	60

pos Pos+1

30 > 50 ? no

[0]	[1]	[2]	[3]	[4]	[5]
20	30	50	10	40	60

pos Pos+1

Arr[pos] > arr[pos+1] ? Yes
swap

[0]	[1]	[2]	[3]	[4]	[5]
20	30	10	50	40	60

50 > 40 ? Yes
swap

[0]	[1]	[2]	[3]	[4]	[5]
20	30	10	50	40	60

50 > 40 ? Yes
swap

pos Pos+1

[0]	[1]	[2]	[3]	[4]	[5]
20	30	10	40	50	60

Iteration 3:

[0]	[1]	[2]	[3]	[4]	[5]
20	30	10	40	50	60

20 > 30 ? No

pos Pos+1

[0]	[1]	[2]	[3]	[4]	[5]
20	30	10	40	50	60

30 > 10 ? Yes
swap

pos Pos+1

[0]	[1]	[2]	[3]	[4]	[5]
20	10	30	40	50	60

30 > 40 ? no

pos Pos+1

[0]	[1]	[2]	[3]	[4]	[5]
20	10	30	40	50	60

Iteration 4:

[0]	[1]	[2]	[3]	[4]	[5]
20	10	30	40	50	60

20 > 10 ? Yes
swap

pos Pos+1

[0]	[1]	[2]	[3]	[4]	[5]
10	20	30	40	50	60

20 > 30 ? no

pos Pos+1

[0]	[1]	[2]	[3]	[4]	[5]
10	20	30	40	50	60

Iteration 5:

[0]	[1]	[2]	[3]	[4]	[5]
10	20	30	40	50	60

10 > 20 ? no

pos Pos+1

[0]	[1]	[2]	[3]	[4]	[5]
10	20	30	40	50	60

No. of Iterations/passes = n-1
= 6-1 = 5

No. of Comparisons = (n-1) + (n-2) + (n-3)….1
= 5+4+3+2+1 = 15