| teration 1: | | 1 | 1 | | - | | |
|--------------|------------------------|---------------------------------|-------------------|-----------------|------------------------|------------------|--|
| | [0] | [1] | [2] | [3] | [4] | [5] | 30 > 20 ? Yes |
| | 30 | 20 | 60 | 50 | 10 | 40 | swap |
| | pos | Pos+1 | | | | | |
| | | | | | | | |
| | [0] | [1] | [2] | [3] | [4] | [5] | 30 > 60 ? no |
| | 20 | 30 | 60 | 50 | 10 | 40 | |
| | | pos | Pos+1 | | | | |
| | [0] | [1] | [2] | [3] | [4] | [5] | |
| | 20 | 30 | 60 | 50 | 10 | 40 | 60 > 50 ? Yes |
| | | | pos | Pos+1 | | | swap |
| | | | | | | | |
| | [0] | [1] | [2] | [3] | [4] | [5] | 60 > 10 ? Yes |
| | 20 | 30 | 50 | 60 | 10 | 40 | swap |
| | | | | pos | Pos+1 | | |
| | | T | | | T | | |
| | [0] | [1] | [2] | [3] | [4] | [5] | 60 > 40 ? Yes |
| | 20 | 30 | 50 | 10 | 60 | 40 | swap |
| | | | | | pos | Pos+1 | |
| | [0] | [1] | [2] | [3] | [4] | [5] | |
| | 20 | 30 | 50 | 10 | 40 | 60 | |
| | | · | | · | | | |
| | | | | | | | |
| Itanatian 2. | | | | | | | |
| Iteration 2: | [0] | [1] | [2] | [3] | [4] | <mark>[5]</mark> | |
| Iteration 2: | [0] | [1] | [2] 50 | [3] | [4] | [5] 60 | Arr[pos] > arr[pos+1] ? no |
| Iteration 2: | | 30 | 50 | | | [5] 60 | Arr[pos] > arr[pos+1] ? no |
| Iteration 2: | 20 | | 50 | | | | Arr[pos] > arr[pos+1] ? no |
| Iteration 2: | pos | 30 Pos+1 | 50 | 10 | 40 | <mark>60</mark> | |
| Iteration 2: | pos [0] | 30 Pos+1 | 50 | [3] | 40 | [5] | Arr[pos] > arr[pos+1] ? no 30 > 50 ? no |
| Iteration 2: | pos | 30 Pos+1 | 50 | [3] 10 | 40 | <mark>60</mark> | |
| Iteration 2: | 20 pos [0] 20 | 30 Pos+1 [1] 30 pos | [2] 50 Pos+ | [3] 10 | [4] 40 | [5] 60 | 30 > 50 ? no |
| Iteration 2: | [0] | 30 Pos+1 [1] 30 pos | [2] 50 Pos+ | [3] 10 1 | [4] 40 | [5] [5] | 30 > 50 ? no Arr[pos] > arr[pos+1] ? Ye |
| Iteration 2: | 20 pos [0] 20 | 30 Pos+1 [1] 30 pos | [2] 50 Pos+ | [3] 10 | [4] 40 | [5] 60 | 30 > 50 ? no |
| Iteration 2: | [0] | 30 Pos+1 [1] 30 pos | [2] 50 Pos+ | [3] 10 1 | [4] 40 [4] 40 | [5] [5] | 30 > 50 ? no Arr[pos] > arr[pos+1] ? Ye |
| Iteration 2: | [0] | 30 Pos+1 [1] 30 pos | [2] 50 Pos+ | [3] 10 -1 | [4] 40 [4] 40 | [5] [5] | 30 > 50 ? no Arr[pos] > arr[pos+1] ? Ye |

| | 20 | 30 | 10 | 50 | 40 | <mark>60</mark> | 50 > 40 ? Yes swap |
|--------------|------------------|--|---|--|-------------------------------------|------------------------|-----------------------|
| | | - | | | Pos+1 | | • |
| | | | | pos | FUS+1 | | |
| | [0] | [1] | [2] | [3] | <mark>[4]</mark> | <mark>[5]</mark> | |
| | 20 | 30 | 10 | 40 | <mark>50</mark> | <mark>60</mark> | |
| | | | | | | | |
| | | | | | | | |
| Iteration 3: | [0] | [4] | [2] | [2] | [4] | re1 | 20 > 30 ? No |
| | [0] | [1] | [2] | [3] | [4] | [5] | 20 > 30 : 100 |
| | 20 | 30 | 10 | 40 | <mark>50</mark> | <mark>60</mark> | |
| | pos | Pos+ | -1 | | | | |
| | | | | | | |] |
| | [0] | | | | [4] | [5] | 30 > 10 ? Yes |
| | 20 | 30 |) 10 | 40 | <mark>50</mark> | <mark>60</mark> | swap |
| | | pos | P | os+1 | | | |
| | | | | | | | |
| | [0] | [1 |] [2] | [3] | <mark>[4]</mark> | <mark>[5]</mark> | 30 > 40 ? r |
| | 20 | | | 40 | <mark>50</mark> | <mark>60</mark> | 30 / 10 . 1 |
| | | | pos | s Pos | :+1 | | |
| | | | pos | , 10. | ,,, | | |
| | [1 | 0] [| [1] | 2] <mark>[3</mark>] | [4] | [5] | |
| | | | | 30 40 | | 60 | |
| | | .0 . | 10 3 | 0 <mark>40</mark> | 50 | l OO | |
| | | | | | | | |
| | | | 1 | | | | |
| | | | <u>'</u> | | | | |
| Iteration 4: | | | | | | | |
| Iteration 4: | [0] | [1 |] [2] | | [4] | [5] | 20 > 10 ? \ |
| Iteration 4: | [0] | | | [3] | | | 20 > 10 ? \ swap |
| Iteration 4: | 20 | 10 | 30 | [3] | [4] | [5] | |
| Iteration 4: | | 10 | | [3] | [4] | [5] | |
| Iteration 4: | pos | 10 Po |) 30 s+1 | [3] 40 | [4] 50 | [5] 60 | swap |
| Iteration 4: | pos [0] | 10 Po | 30 s+1] [2] | [3] | [4] 50 | [5] 60 [5] | |
| Iteration 4: | pos | 10 Po |) 30 s+1] [2]) 30 | [3] 40 [3] 40 | [4] 50 | [5] 60 | swap |
| Iteration 4: | pos [0] | 10 Po | 30 s+1] [2] | [3] 40 [3] 40 | [4] 50 | [5] 60 [5] | swap |
| Iteration 4: | pos [0] | 10 Po [1 20 pos |) 30 s+1] [2] O 30 Pos | [3] 40 [3] 40 8+1 | [4] 50 [4] 50 | [5] 60 [5] 60 | swap |
| Iteration 4: | pos [0] 10 | 10 Po [1 20 pos | 30 s+1] [2] O 30 Pos | [3] 40 [3] 40 3+1 | [4] 50 [4] 50 | [5] 60 [5] 60 | swap |
| Iteration 4: | pos [0] 10 | 10 Po [1 20 pos | 30 s+1] [2] O 30 Pos | [3] 40 [3] 40 8+1 | [4] 50 [4] 50 | [5] 60 [5] 60 | swap |
| Iteration 4: | pos [0] 10 | 10 Po [1 20 pos | 30 s+1] [2] O 30 Pos | [3] 40 [3] 40 3+1 | [4] 50 [4] 50 | [5] 60 [5] 60 | swap |
| | pos [0] 10 | 10 Po [1 20 pos | 30 s+1] [2] O 30 Pos | [3] 40 [3] 40 3+1 | [4] 50 [4] 50 | [5] 60 [5] 60 | swap |
| Iteration 4: | pos [0] 10 | 10 Po [1 20 pos | 30 s+1] [2] O 30 Pos [1] [| [3] 40 [3] 40 31 40 31 30 40 | [4] 50 [4] 50 [4] 50 | [5] 60 [5] 60 | swap |
| | 20 pos [0] 10 | Po [1 20 pos 0] [2 0] [3 0] [4 0] [7 0] [| 30 s+1] [2] O 30 Pos [1] [| [3] 40 [3] 40 3+1 | [4] 50 [4] 50 [4] 50 | [5] 60 [5] 60 | swap 20 > 30 ? no |
| | 20 pos [0] 10 10 | 10 Po [1 20 pos D] [0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | 30 30 s+1 [2] [2] 30 30 Pos [1] [1] [1] [1] | [3] 40 [3] 40 31 40 31 30 40 | [4] 50 [4] 50 | [5] 60 [5] 60 | swap |

| [0] | [1] | <mark>[2]</mark> | <mark>[3]</mark> | <mark>[4]</mark> | <mark>[5]</mark> |
|-----|-----------------|------------------|------------------|------------------|------------------|
| 10 | <mark>20</mark> | <mark>30</mark> | <mark>40</mark> | <mark>50</mark> | <mark>60</mark> |

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