

Temp  
44

[0]	[1]	[2]	[3]	[4]	[5]
55	44	22	66	11	33

j i

Is J at valid index ? Yes  
&&  
44 < 55 ? Yes  
1) Shift 55 1 place ahead  
2) Decrement j

[0]	[1]	[2]	[3]	[4]	[5]
	55	22	66	11	33

j i

Is J at valid Index ? No  
As J has reached invalid index, we will copy temp to j+1 index

[0]	[1]	[2]	[3]	[4]	[5]
44	55	22	66	11	33

i

---

Temp  
22

[0]	[1]	[2]	[3]	[4]	[5]
44	55	22	66	11	33

j i

Is J at valid index ? Yes  
&&  
22 < 55 ? Yes  
1) Shift 55 1 pos ahead  
2) Decrement j

[0]	[1]	[2]	[3]	[4]	[5]
44		55	66	11	33

j i

Is J at valid Index ? Yes  
&&  
22 < 44 ? Yes  
1) Shift 44 to 1 pos ahead  
2) Decrement j

[0]	[1]	[2]	[3]	[4]	[5]
	44	55	66	11	33

j i

Is J at valid index ? NO  
As j has reached invalid index,  
Copy temp to j+1 index

[0]	[1]	[2]	[3]	[4]	[5]
22	44	55	66	11	33

---

Temp  
66

[0]	[1]	[2]	[3]	[4]	[5]
22	44	55	66	11	33

j i

Is J at valid index ? YES  
&&  
66 < 55 ? NO  
Copy temp to j+1 index

Temp  
11

[0]	[1]	[2]	[3]	[4]	[5]
22	44	55	66	11	33

Is J at valid index ? Yes  
&&  
Temp < arr[j] ? Yes  
11 < 66 ? Yes

--	--	--	--	--	--	--

j i

- 11 < 66 ? Yes  
 1) Shift 66 to j+1 index  
 2) j--

[0]	[1]	[2]	[3]	[4]	[5]
22	44	55		66	33

j i

- Is J at valid index ? Yes  
 &&  
 Is temp < arr[j]?  
 11 < 55 ? Yes  
 1) Shift 55 to j+1 index  
 2) j--

[0]	[1]	[2]	[3]	[4]	[5]
22	44		55	66	33

j i

- Is J at valid index ? Yes  
 &&  
 Is temp < arr[j]  
 11 < 44 ? Yes  
 1) Shift 44 to j+1 index  
 2) j--

[0]	[1]	[2]	[3]	[4]	[5]
22		44	55	66	33

j i

- Is j at valid index ? Yes  
 &&  
 Is 11 < 22 ? Yes  
 1) Shift 22 to j+1 index  
 2) j--

[0]	[1]	[2]	[3]	[4]	[5]
	22	44	55	66	33

j i

- Is j at valid index ? No  
 copy temp to j+1 index

[0]	[1]	[2]	[3]	[4]	[5]
11	22	44	55	66	33

Temp  
33

[0]	[1]	[2]	[3]	[4]	[5]
11	22	44	55	66	33

j i

- Is j at valid index ? Yes  
 &&  
 Temp < arr[j] ?  
 33 < 66 ? Yes  
 1) Shift 66 to j+1 index  
 2) j--

[0]	[1]	[2]	[3]	[4]	[5]
11	22	44	55		66

j i

- Is j at valid index ? Yes  
 &&  
 33 < 55 ? Yes  
 1) Shift 55 to j+1 index  
 2) j--

[0]	[1]	[2]	[3]	[4]	[5]
11	22	44		55	66

j i

- Is j at valid index ? Yes  
 &&  
 33 < 44 ? Yes  
 1) Shift 44 to j+1 index  
 2) i--

2) j--

[0]	[1]	[2]	[3]	[4]	[5]
11	22		44	55	66

j

i

Is J at valid Index ? Yes  
&&  
33 < 22 ? No  
Copy temp to J+1 index

[0]	[1]	[2]	[3]	[4]	[5]
11	22	33	44	55	66