Insertion Sort 11 April 2024 14:47 temp [0] [1] [2] [3] [4] [5] If j is at valid index and 44 55 44 22 66 11 33 Temp < arr[j] ? 44 < 55 ? Yes j i 1)shift arr[j] to j + 1index 2) Decrement j: j--[0] [1] [2] [3] [4] [5] 55 22 66 11 33 i If j is at valid index? No Copy temp to j+1 index [0] [1] [2] [3] [4] [5] 44 55 22 66 11 33 i Temp Copy arr[i] to temp variable 22 [0] [1] [2] [3] [4] [5] 44 55 22 66 11 33 Check if j is at valid index j i and If temp < arr[j] 1) Shift arr[j] to j+1 index 2) j--[0] [1] [2] [3] [4] [5] 44 55 66 11 33 Check if j is at valid position i j If temp < arr[j] ? Shift arr[j] to j+1 index 2) j--[0] [1] [2] [3] [4] [5] 44 55 66 11 33 Here j is not at valid j position, Copy temp to j+1 [0] [1] [2] [3] [4] [5] 22 44 55 66 11 33 j i temp Is j at valid position [0] [1] [2] [3] [4] [5] 66 And 22 44 55 66 11 33 Temp < arr[j] ? 66 < 55 ? no j i [0] [1] [2] [3] [4] [5] temp J is at valid position 22 44 55 66 11 33 And temp < arr[j] 11 i 1) Shift arr[j] to j+1 index 2) j--

	[0]	[1]	[2]	[3]	[4]	[5]	
	22	44	55		66	33	J is at valid position
			j				And temp < arr[j]
i							1) Shift arr[j] to j+1 index
							2) j
	[0]	[1]	[2]	[3]	[4]	[5]	
	22		44	55	66	33	J is at valid position
							And temp < arr[j]
j							 Shift arr[j] to j+1 index
							2) j
	[0]	[1]	[2]	[3]	[4]	[5]	
	11	22	44	55	66	33	J is not at valid position
i							So,
j					i		Copy temp to j+1 index
emp	[0]	[1]	[2]	[3]	[4]	[5]	Lie et velid escition and
22	11	22	44	55	66	33	J is at valid position and Temp < arr[j]
33	11			33	00	33	1) Shift
					j	i	2) j
							2)]
	[0]	[1]	[2]	[3]	[4]	[5]	
	11	22	44	55	[.]	66	J is at valid position and
	11	22	44	33		00	Temp < arr[j]
j i							1) Shift
							2) j
	[0]	[1]	[2]	[3]	[4]	[5]	
	11	22	44		55	66	J is at valid position and
j ,							Temp < arr[j]
i							1) Shift
							2) j
	[0]	[1]	[2]	[3]	[4]	[5]	
			[2]				
	11	22		44	55	66	J is at valid position
j							Temp < arr[j] ? False
						•	So,
							Copy temp to j + 1 index
	[O	1 [4	1 r	רז וכ	1 [/	ון ורי	
	[0]			2] [3 3 4 ⁴		[5] 5 66	
	11	L 22	, , 2	~ I //	1 I E	- 66	I I