**No.4 (A)**

**MergeSort**

L=[80,7,24,16,43,91,35,2,19,72]

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **80** | **7** | **24** | **16** | **43** | **91** | **35** | **2** | **19** | **72** |

Proses 1

80

7

24

26

91

43

35

2

72

19

Proses 2

|  |  |  |  |
| --- | --- | --- | --- |
| 7 | 16 | 24 | 80 |

72

|  |  |  |  |
| --- | --- | --- | --- |
| 2 | 35 | 43 | 91 |

19

Proses 3

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | 7 | 16 | 24 | 35 | 43 | 80 | 91 |

19

72

Proses 4

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | 7 | 16 | 19 | 24 | 35 | 43 | 72 | 80 | 91 |

# No.4 (B)

L=[80,7,24,16,43,91,35,2,19,72]

# QuickSort

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **80** | **7** | **24** | **16** | **43** | **91** | **35** | **2** | **19** | **72** |

pivot

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **80** | **7** | **24** | **16** | **43** | **91** | **35** | **2** | **19** | **72** |

Low High

pivot

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **72** | **7** | **24** | **16** | **43** | **91** | **35** | **2** | **19** | **80** |

Low High

pivot

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **72** | **7** | **24** | **16** | **43** | **91** | **35** | **2** | **19** | **80** |

Low High

pivot

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **72** | **7** | **24** | **16** | **43** | **80** | **35** | **2** | **19** | **91** |

Low High

pivot

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **72** | **7** | **24** | **16** | **43** | **19** | **35** | **2** | **80** | **91** |

Low High

pivot

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **72** | **7** | **24** | **16** | **43** | **19** | **35** | **2** | **80** | **91** |

Low High

pivot

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2** | **7** | **24** | **16** | **43** | **19** | **35** | **72** | **80** | **91** |

Low High

pivot

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2** | **7** | **24** | **16** | **43** | **19** | **35** | **72** | **80** | **91** |

Low High

pivot

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2** | **7** | **24** | **16** | **43** | **19** | **35** | **72** | **80** | **91** |

Low High

pivot

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2** | **7** | **24** | **16** | **43** | **19** | **35** | **72** | **80** | **91** |

Low High

pivot

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2** | **7** | **24** | **16** | **43** | **19** | **35** | **72** | **80** | **91** |

Low High

pivot

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2** | **7** | **19** | **16** | **43** | **24** | **35** | **72** | **80** | **91** |

Low High

pivot

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2** | **7** | **19** | **16** | **43** | **24** | **35** | **72** | **80** | **91** |

Low High pivot

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2** | **7** | **19** | **16** | **24** | **43** | **35** | **72** | **80** | **91** |

Low High

pivot

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2** | **7** | **19** | **16** | **24** | **43** | **35** | **72** | **80** | **91** |

Low High pivot

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2** | **7** | **16** | **19** | **24** | **43** | **35** | **72** | **80** | **91** |

Low High

pivot

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2** | **7** | **16** | **19** | **24** | **43** | **35** | **72** | **80** | **91** |

Low High

pivot

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2** | **7** | **16** | **19** | **24** | **35** | **43** | **72** | **80** | **91** |

Low High

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2** | **7** | **16** | **19** | **24** | **35** | **43** | **72** | **80** | **91** |