**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

Proses2

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

72

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

19

Proses3

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

19

72

Proses4

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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 |