//Task_1//
//--Task One--
Testing for Array 1:Merge Sort: 173 ms|Merge Sort 2: 24 ms|Quick
Sort: 47 ms|Quick Sort 2: 43 ms|
Testing for Array 2:Merge Sort: 151 ms|Merge Sort 2: 23 ms|Quick
Sort: 13 ms|Quick Sort 2: 29 ms|
Testing for Array 3:Merge Sort: 159 ms|Merge Sort 2: 27 ms|Quick
Sort: 21 ms|Quick Sort 2: 9 ms|
Testing for Array 4:Merge Sort: 163 ms|Merge Sort 2: 16 ms|Quick
Sort: 18 ms|Quick Sort 2: 6 ms|
Testing for Array 5:Merge Sort: 149 ms|Merge Sort 2: 17 ms|Quick
Sort: 14 ms|Quick Sort 2: 7 ms|
Testing for Array 6:Merge Sort: 165 ms|Merge Sort 2: 17 ms|Quick
Sort: 15 ms|Quick Sort 2: 9 ms|
Testing for Array 7:Merge Sort: 159 ms|Merge Sort 2: 14 ms|Quick
Sort: 13 ms|Quick Sort 2: 6 ms|
Testing for Array 8:Merge Sort: 163 ms|Merge Sort 2: 23 ms|Quick
Sort: 19 ms|Quick Sort 2: 14 ms|
Testing for Array 9:Merge Sort: 159 ms|Merge Sort 2: 17 ms|Quick
Sort: 14 ms|Quick Sort 2: 7 ms|
Testing for Array 10:Merge Sort: 155 ms|Merge Sort 2: 12 ms|Quick
Sort: 18 ms|Quick Sort 2: 10 ms|
Testing for Array 11:Merge Sort: 162 ms|Merge Sort 2: 15 ms|Quick
Sort: 20 ms|Quick Sort 2: 8 ms|
Testing for Array 12:Merge Sort: 160 ms|Merge Sort 2: 17 ms|Quick
Sort: 19 ms|Quick Sort 2: 6 ms|
Testing for Array 13:Merge Sort: 158 ms|Merge Sort 2: 13 ms|Quick
Sort: 15 ms|Quick Sort 2: 7 ms|
Testing for Array 14:Merge Sort: 154 ms|Merge Sort 2: 19 ms|Quick
Sort: 21 ms|Quick Sort 2: 10 ms|
Testing for Array 15:Merge Sort: 177 ms|Merge Sort 2: 19 ms|Quick
Sort: 15 ms|Quick Sort 2: 8 ms|
Testing for Array 16:Merge Sort: 163 ms|Merge Sort 2: 19 ms|Quick
Sort: 13 ms|Quick Sort 2: 8 ms|
Testing for Array 17:Merge Sort: 157 ms|Merge Sort 2: 20 ms|Quick
Sort: 16 ms|Quick Sort 2: 8 ms|
Testing for Array 18:Merge Sort: 156 ms|Merge Sort 2: 16 ms|Quick
Sort: 21 ms|Quick Sort 2: 8 ms|
Testing for Array 19:Merge Sort: 147 ms|Merge Sort 2: 15 ms|Quick
Sort: 15 ms|Quick Sort 2: 8 ms|
Testing for Array 20:Merge Sort: 163 ms|Merge Sort 2: 18 ms|Quick
Sort: 14 ms|Quick Sort 2: 8 ms|

Testing for Array 21:Merge Sort: 164 ms|Merge Sort 2: 22 ms|Quick Sort: 16 ms|Quick Sort 2: 8 ms|
Testing for Array 22:Merge Sort: 163 ms|Merge Sort 2: 12 ms|Quick Sort: 15 ms|Quick Sort 2: 10 ms|
Testing for Array 23:Merge Sort: 151 ms|Merge Sort 2: 18 ms|Quick Sort: 20 ms|Quick Sort 2: 9 ms|
Testing for Array 24:Merge Sort: 155 ms|Merge Sort 2: 19 ms|Quick Sort: 14 ms|Quick Sort 2: 6 ms|
Testing for Array 25:Merge Sort: 147 ms|Merge Sort 2: 17 ms|Quick Sort: 16 ms|Quick Sort 2: 9 ms|
Testing for Array 26:Merge Sort: 163 ms|Merge Sort 2: 14 ms|Quick Sort: 16 ms|Quick Sort 2: 10 ms|
Testing for Array 27:Merge Sort: 158 ms|Merge Sort 2: 18 ms|Quick Sort: 15 ms|Quick Sort 2: 9 ms|
Testing for Array 28:Merge Sort: 161 ms|Merge Sort 2: 15 ms|Quick Sort: 19 ms|Quick Sort 2: 11 ms|
Testing for Array 29:Merge Sort: 175 ms|Merge Sort 2: 15 ms|Quick Sort: 18 ms|Quick Sort 2: 9 ms|
Testing for Array 30:Merge Sort: 172 ms|Merge Sort 2: 21 ms|Quick Sort: 16 ms|Quick Sort 2: 7 ms|
Testing for Array 31:Merge Sort: 171 ms|Merge Sort 2: 20 ms|Quick Sort: 18 ms|Quick Sort 2: 8 ms|
Testing for Array 32:Merge Sort: 165 ms|Merge Sort 2: 22 ms|Quick Sort: 18 ms|Quick Sort 2: 10 ms|
Testing for Array 33:Merge Sort: 165 ms|Merge Sort 2: 13 ms|Quick Sort: 16 ms|Quick Sort 2: 9 ms|
Testing for Array 34:Merge Sort: 155 ms|Merge Sort 2: 20 ms|Quick Sort: 13 ms|Quick Sort 2: 7 ms|
Testing for Array 35:Merge Sort: 161 ms|Merge Sort 2: 16 ms|Quick Sort: 21 ms|Quick Sort 2: 10 ms|
Testing for Array 36:Merge Sort: 166 ms|Merge Sort 2: 20 ms|Quick Sort: 20 ms|Quick Sort 2: 8 ms|
Testing for Array 37:Merge Sort: 153 ms|Merge Sort 2: 19 ms|Quick Sort: 21 ms|Quick Sort 2: 10 ms|
Testing for Array 38:Merge Sort: 148 ms|Merge Sort 2: 14 ms|Quick Sort: 16 ms|Quick Sort 2: 7 ms|
Testing for Array 39:Merge Sort: 151 ms|Merge Sort 2: 12 ms|Quick Sort: 13 ms|Quick Sort 2: 8 ms|
Testing for Array 40:Merge Sort: 151 ms|Merge Sort 2: 15 ms|Quick Sort: 11 ms|Quick Sort 2: 6 ms|
Testing for Array 41:Merge Sort: 155 ms|Merge Sort 2: 23 ms|Quick Sort: 20 ms|Quick Sort 2: 6 ms|

Testing for Array 42:Merge Sort: 160 ms|Merge Sort 2: 19 ms|Quick Sort: 11 ms|Quick Sort 2: 6 ms|
Testing for Array 43:Merge Sort: 160 ms|Merge Sort 2: 17 ms|Quick Sort: 13 ms|Quick Sort 2: 8 ms|
Testing for Array 44:Merge Sort: 162 ms|Merge Sort 2: 19 ms|Quick Sort: 19 ms|Quick Sort 2: 8 ms|
Testing for Array 45:Merge Sort: 153 ms|Merge Sort 2: 21 ms|Quick Sort: 19 ms|Quick Sort 2: 9 ms|
Testing for Array 46:Merge Sort: 159 ms|Merge Sort 2: 17 ms|Quick Sort: 11 ms|Quick Sort 2: 6 ms|
Testing for Array 47:Merge Sort: 172 ms|Merge Sort 2: 16 ms|Quick Sort: 17 ms|Quick Sort 2: 9 ms|
Testing for Array 48:Merge Sort: 150 ms|Merge Sort 2: 19 ms|Quick Sort: 19 ms|Quick Sort 2: 7 ms|
Testing for Array 49:Merge Sort: 148 ms|Merge Sort 2: 13 ms|Quick Sort: 14 ms|Quick Sort 2: 8 ms|
Testing for Array 50:Merge Sort: 152 ms|Merge Sort 2: 18 ms|Quick Sort: 19 ms|Quick Sort 2: 7 ms|
Testing for Array 51:Merge Sort: 161 ms|Merge Sort 2: 18 ms|Quick Sort: 15 ms|Quick Sort 2: 10 ms|
Testing for Array 52:Merge Sort: 158 ms|Merge Sort 2: 16 ms|Quick Sort: 18 ms|Quick Sort 2: 10 ms|
Testing for Array 53:Merge Sort: 169 ms|Merge Sort 2: 22 ms|Quick Sort: 20 ms|Quick Sort 2: 10 ms|
Testing for Array 54:Merge Sort: 166 ms|Merge Sort 2: 13 ms|Quick Sort: 17 ms|Quick Sort 2: 10 ms|
Testing for Array 55:Merge Sort: 167 ms|Merge Sort 2: 19 ms|Quick Sort: 14 ms|Quick Sort 2: 10 ms|
Testing for Array 56:Merge Sort: 172 ms|Merge Sort 2: 15 ms|Quick Sort: 19 ms|Quick Sort 2: 10 ms|
Testing for Array 57:Merge Sort: 157 ms|Merge Sort 2: 17 ms|Quick Sort: 18 ms|Quick Sort 2: 6 ms|
Testing for Array 58:Merge Sort: 155 ms|Merge Sort 2: 13 ms|Quick Sort: 18 ms|Quick Sort 2: 10 ms|
Testing for Array 59:Merge Sort: 168 ms|Merge Sort 2: 17 ms|Quick Sort: 19 ms|Quick Sort 2: 6 ms|
Testing for Array 60:Merge Sort: 163 ms|Merge Sort 2: 22 ms|Quick Sort: 17 ms|Quick Sort 2: 8 ms|
Testing for Array 61:Merge Sort: 166 ms|Merge Sort 2: 13 ms|Quick Sort: 16 ms|Quick Sort 2: 9 ms|
Testing for Array 62:Merge Sort: 156 ms|Merge Sort 2: 22 ms|Quick Sort: 18 ms|Quick Sort 2: 6 ms|

Testing for Array 63:Merge Sort: 163 ms|Merge Sort 2: 22 ms|Quick Sort: 20 ms|Quick Sort 2: 7 ms|
Testing for Array 64:Merge Sort: 140 ms|Merge Sort 2: 18 ms|Quick Sort: 21 ms|Quick Sort 2: 9 ms|
Testing for Array 65:Merge Sort: 159 ms|Merge Sort 2: 16 ms|Quick Sort: 20 ms|Quick Sort 2: 10 ms|
Testing for Array 66:Merge Sort: 160 ms|Merge Sort 2: 14 ms|Quick Sort: 17 ms|Quick Sort 2: 6 ms|
Testing for Array 67:Merge Sort: 147 ms|Merge Sort 2: 21 ms|Quick Sort: 13 ms|Quick Sort 2: 6 ms|
Testing for Array 68:Merge Sort: 158 ms|Merge Sort 2: 16 ms|Quick Sort: 12 ms|Quick Sort 2: 10 ms|
Testing for Array 69:Merge Sort: 149 ms|Merge Sort 2: 16 ms|Quick Sort: 16 ms|Quick Sort 2: 6 ms|
Testing for Array 70:Merge Sort: 164 ms|Merge Sort 2: 22 ms|Quick Sort: 18 ms|Quick Sort 2: 8 ms|
Testing for Array 71:Merge Sort: 155 ms|Merge Sort 2: 15 ms|Quick Sort: 20 ms|Quick Sort 2: 10 ms|
Testing for Array 72:Merge Sort: 158 ms|Merge Sort 2: 20 ms|Quick Sort: 17 ms|Quick Sort 2: 6 ms|
Testing for Array 73:Merge Sort: 157 ms|Merge Sort 2: 13 ms|Quick Sort: 12 ms|Quick Sort 2: 7 ms|
Testing for Array 74:Merge Sort: 159 ms|Merge Sort 2: 21 ms|Quick Sort: 19 ms|Quick Sort 2: 10 ms|
Testing for Array 75:Merge Sort: 160 ms|Merge Sort 2: 18 ms|Quick Sort: 11 ms|Quick Sort 2: 6 ms|
Testing for Array 76:Merge Sort: 152 ms|Merge Sort 2: 19 ms|Quick Sort: 16 ms|Quick Sort 2: 10 ms|
Testing for Array 77:Merge Sort: 147 ms|Merge Sort 2: 12 ms|Quick Sort: 17 ms|Quick Sort 2: 9 ms|
Testing for Array 78:Merge Sort: 136 ms|Merge Sort 2: 16 ms|Quick Sort: 20 ms|Quick Sort 2: 11 ms|
Testing for Array 79:Merge Sort: 159 ms|Merge Sort 2: 20 ms|Quick Sort: 15 ms|Quick Sort 2: 6 ms|
Testing for Array 80:Merge Sort: 151 ms|Merge Sort 2: 21 ms|Quick Sort: 20 ms|Quick Sort 2: 11 ms|
Testing for Array 81:Merge Sort: 165 ms|Merge Sort 2: 22 ms|Quick Sort: 21 ms|Quick Sort 2: 6 ms|
Testing for Array 82:Merge Sort: 149 ms|Merge Sort 2: 18 ms|Quick Sort: 21 ms|Quick Sort 2: 8 ms|
Testing for Array 83:Merge Sort: 166 ms|Merge Sort 2: 14 ms|Quick Sort: 10 ms|Quick Sort 2: 6 ms|

Testing for Array 84:Merge Sort: 170 ms|Merge Sort 2: 12 ms|Quick Sort: 20 ms|Quick Sort 2: 10 ms|
Testing for Array 85:Merge Sort: 146 ms|Merge Sort 2: 14 ms|Quick Sort: 21 ms|Quick Sort 2: 10 ms|
Testing for Array 86:Merge Sort: 171 ms|Merge Sort 2: 22 ms|Quick Sort: 19 ms|Quick Sort 2: 9 ms|
Testing for Array 87:Merge Sort: 155 ms|Merge Sort 2: 21 ms|Quick Sort: 16 ms|Quick Sort 2: 8 ms|
Testing for Array 88:Merge Sort: 172 ms|Merge Sort 2: 20 ms|Quick Sort: 21 ms|Quick Sort 2: 10 ms|
Testing for Array 89:Merge Sort: 168 ms|Merge Sort 2: 21 ms|Quick Sort: 16 ms|Quick Sort 2: 8 ms|
Testing for Array 90:Merge Sort: 157 ms|Merge Sort 2: 15 ms|Quick Sort: 16 ms|Quick Sort 2: 11 ms|
Testing for Array 91:Merge Sort: 168 ms|Merge Sort 2: 20 ms|Quick Sort: 16 ms|Quick Sort 2: 8 ms|
Testing for Array 92:Merge Sort: 173 ms|Merge Sort 2: 22 ms|Quick Sort: 14 ms|Quick Sort 2: 7 ms|
Testing for Array 93:Merge Sort: 155 ms|Merge Sort 2: 22 ms|Quick Sort: 16 ms|Quick Sort 2: 7 ms|
Testing for Array 94:Merge Sort: 157 ms|Merge Sort 2: 22 ms|Quick Sort: 19 ms|Quick Sort 2: 8 ms|
Testing for Array 95:Merge Sort: 152 ms|Merge Sort 2: 16 ms|Quick Sort: 19 ms|Quick Sort 2: 9 ms|
Testing for Array 96:Merge Sort: 155 ms|Merge Sort 2: 16 ms|Quick Sort: 14 ms|Quick Sort 2: 8 ms|
Testing for Array 97:Merge Sort: 148 ms|Merge Sort 2: 14 ms|Quick Sort: 15 ms|Quick Sort 2: 6 ms|
Testing for Array 98:Merge Sort: 155 ms|Merge Sort 2: 19 ms|Quick Sort: 11 ms|Quick Sort 2: 8 ms|
Testing for Array 99:Merge Sort: 141 ms|Merge Sort 2: 16 ms|Quick Sort: 20 ms|Quick Sort 2: 10 ms|
Testing for Array 100:Merge Sort: 150 ms|Merge Sort 2: 21 ms|Quick Sort: 11 ms|Quick Sort 2: 6 ms|

Array Quick Sort has an average runtime of 17 ms
Array Quick Sort(2) has an average runtime of 17 ms
Array Merge Sort has an average runtime of 158 ms
Array Merge Sort(2) has an average runtime of 17 ms
BUILD SUCCESSFUL (total time: 21 seconds)
//Task_2//
//
--Task Two--

--Comparison on Random Arrays--
Testing for Array 1:Quick Sort: 126 ms|Quick Sort 2: 31 ms|Quick Sort 3: 73 ms|Quick Sort 4: 31 ms|
Testing for Array 2:Quick Sort: 136 ms|Quick Sort 2: 10 ms|Quick Sort 3: 17 ms|Quick Sort 4: 16 ms|
Testing for Array 3:Quick Sort: 128 ms|Quick Sort 2: 7 ms|Quick Sort 3: 10 ms|Quick Sort 4: 5 ms|
Testing for Array 4:Quick Sort: 132 ms|Quick Sort 2: 10 ms|Quick Sort 3: 21 ms|Quick Sort 4: 7 ms|
Testing for Array 5:Quick Sort: 129 ms|Quick Sort 2: 10 ms|Quick Sort 3: 18 ms|Quick Sort 4: 5 ms|
Testing for Array 6:Quick Sort: 121 ms|Quick Sort 2: 10 ms|Quick Sort 3: 11 ms|Quick Sort 4: 5 ms|
Testing for Array 7:Quick Sort: 125 ms|Quick Sort 2: 10 ms|Quick Sort 3: 9 ms|Quick Sort 4: 5 ms|
Testing for Array 8:Quick Sort: 136 ms|Quick Sort 2: 9 ms|Quick Sort 3: 18 ms|Quick Sort 4: 9 ms|
Testing for Array 9:Quick Sort: 139 ms|Quick Sort 2: 11 ms|Quick Sort 3: 11 ms|Quick Sort 4: 5 ms|
Testing for Array 10:Quick Sort: 117 ms|Quick Sort 2: 11 ms|Quick Sort 3: 17 ms|Quick Sort 4: 6 ms|
Array Quick Sort has an average runtime of 128 ms
Array Quick Sort(2) has an average runtime of 11 ms
Array Quick Sort(3) has an average runtime of 20 ms
Array Quick Sort(4) has an average runtime of 9 ms
--Comparison on Sorted Arrays--
Testing for Array 1:Quick Sort: 345 ms|Quick Sort 2: 107 ms|Quick Sort 3: 171 ms|Quick Sort 4: 159 ms|
Testing for Array 2:Quick Sort: 375 ms|Quick Sort 2: 116 ms|Quick Sort 3: 118 ms|Quick Sort 4: 95 ms|
Testing for Array 3:Quick Sort: 336 ms|Quick Sort 2: 117 ms|Quick Sort 3: 167 ms|Quick Sort 4: 84 ms|
Testing for Array 4:Quick Sort: 324 ms|Quick Sort 2: 130 ms|Quick Sort 3: 160 ms|Quick Sort 4: 95 ms|
Testing for Array 5:Quick Sort: 341 ms|Quick Sort 2: 102 ms|Quick Sort 3: 145 ms|Quick Sort 4: 100 ms|
Testing for Array 6:Quick Sort: 336 ms|Quick Sort 2: 123 ms|Quick Sort 3: 146 ms|Quick Sort 4: 101 ms|
Testing for Array 7:Quick Sort: 359 ms|Quick Sort 2: 123 ms|Quick Sort 3: 162 ms|Quick Sort 4: 107 ms|
Testing for Array 8:Quick Sort: 328 ms|Quick Sort 2: 112 ms|Quick Sort 3: 147 ms|Quick Sort 4: 99 ms|

Testing for Array 9:Quick Sort: 337 ms|Quick Sort 2: 113 ms|Quick
Sort 3: 140 ms|Quick Sort 4: 89 ms|
Testing for Array 10:Quick Sort: 363 ms|Quick Sort 2: 112 ms|Quick
Sort 3: 164 ms|Quick Sort 4: 85 ms|
Array Quick Sort has an average runtime of 344 ms
Array Quick Sort(2) has an average runtime of 115 ms
Array Quick Sort(3) has an average runtime of 152 ms
Array Quick Sort(4) has an average runtime of 101 ms
--Comparison on Reversely Sorted Arrays--
Testing for Array 1:Quick Sort: 304 ms|Quick Sort 2: 117 ms|Quick
Sort 3: 189 ms|Quick Sort 4: 103 ms|
Testing for Array 2:Quick Sort: 352 ms|Quick Sort 2: 142 ms|Quick
Sort 3: 148 ms|Quick Sort 4: 100 ms|
Testing for Array 3:Quick Sort: 366 ms|Quick Sort 2: 112 ms|Quick
Sort 3: 158 ms|Quick Sort 4: 91 ms|
Testing for Array 4:Quick Sort: 337 ms|Quick Sort 2: 124 ms|Quick
Sort 3: 163 ms|Quick Sort 4: 104 ms|
Testing for Array 5:Quick Sort: 351 ms|Quick Sort 2: 124 ms|Quick
Sort 3: 179 ms|Quick Sort 4: 105 ms|
Testing for Array 6:Quick Sort: 385 ms|Quick Sort 2: 105 ms|Quick
Sort 3: 163 ms|Quick Sort 4: 98 ms|
Testing for Array 7:Quick Sort: 363 ms|Quick Sort 2: 132 ms|Quick
Sort 3: 158 ms|Quick Sort 4: 112 ms|
Testing for Array 8:Quick Sort: 368 ms|Quick Sort 2: 112 ms|Quick
Sort 3: 177 ms|Quick Sort 4: 91 ms|
Testing for Array 9:Quick Sort: 361 ms|Quick Sort 2: 129 ms|Quick
Sort 3: 152 ms|Quick Sort 4: 96 ms|
Testing for Array 10:Quick Sort: 341 ms|Quick Sort 2: 114 ms|Quick
Sort 3: 159 ms|Quick Sort 4: 96 ms|
Array Quick Sort has an average runtime of 352 ms
Array Quick Sort(2) has an average runtime of 121 ms
Array Quick Sort(3) has an average runtime of 164 ms
Array Quick Sort(4) has an average runtime of 99 ms
BUILD SUCCESSFUL (total time: 49 seconds)

**//Task_3///
//**
--Task Three--
--Comparison on Random Arrays--
Testing for Array 1:Quick Sort: 129 ms|Quick Sort 4: 34 ms|Quick Sort
5: 11 ms|Quick Sort 6: 34 ms|Heap Sort: 147 ms|
Testing for Array 2:Quick Sort: 138 ms|Quick Sort 4: 8 ms|Quick Sort
5: 9 ms|Quick Sort 6: 8 ms|Heap Sort: 154 ms|

Testing for Array 3:Quick Sort: 132 ms|Quick Sort 4: 9 ms|Quick Sort 5: 9 ms|Quick Sort 6: 9 ms|Heap Sort: 130 ms|
Testing for Array 4:Quick Sort: 127 ms|Quick Sort 4: 4 ms|Quick Sort 5: 7 ms|Quick Sort 6: 4 ms|Heap Sort: 129 ms|
Testing for Array 5:Quick Sort: 121 ms|Quick Sort 4: 9 ms|Quick Sort 5: 9 ms|Quick Sort 6: 9 ms|Heap Sort: 126 ms|
Testing for Array 6:Quick Sort: 128 ms|Quick Sort 4: 6 ms|Quick Sort 5: 7 ms|Quick Sort 6: 6 ms|Heap Sort: 129 ms|
Testing for Array 7:Quick Sort: 133 ms|Quick Sort 4: 8 ms|Quick Sort 5: 9 ms|Quick Sort 6: 8 ms|Heap Sort: 151 ms|
Testing for Array 8:Quick Sort: 119 ms|Quick Sort 4: 7 ms|Quick Sort 5: 7 ms|Quick Sort 6: 7 ms|Heap Sort: 113 ms|
Testing for Array 9:Quick Sort: 124 ms|Quick Sort 4: 7 ms|Quick Sort 5: 8 ms|Quick Sort 6: 7 ms|Heap Sort: 141 ms|
Testing for Array 10:Quick Sort: 132 ms|Quick Sort 4: 9 ms|Quick Sort 5: 9 ms|Quick Sort 6: 9 ms|Heap Sort: 141 ms|
Array Quick Sort has an average runtime of 128 ms
Array Quick Sort(4) has an average runtime of 10 ms
Array Quick Sort(5) has an average runtime of 8 ms
Array Quick Sort(6) has an average runtime of 10 ms
Array Heap Sort has an average runtime of 136 ms
--Comparison on Reversely Sorted Arrays--
Testing for Array 1:Quick Sort: 22 ms|Quick Sort 4: 6 ms|Quick Sort 5: 7 ms|Quick Sort 6: 6 ms|Heap Sort: 129 ms|
Testing for Array 2:Quick Sort: 21 ms|Quick Sort 4: 9 ms|Quick Sort 5: 11 ms|Quick Sort 6: 9 ms|Heap Sort: 130 ms|
Testing for Array 3:Quick Sort: 14 ms|Quick Sort 4: 5 ms|Quick Sort 5: 6 ms|Quick Sort 6: 5 ms|Heap Sort: 131 ms|
Testing for Array 4:Quick Sort: 16 ms|Quick Sort 4: 9 ms|Quick Sort 5: 8 ms|Quick Sort 6: 9 ms|Heap Sort: 126 ms|
Testing for Array 5:Quick Sort: 13 ms|Quick Sort 4: 6 ms|Quick Sort 5: 4 ms|Quick Sort 6: 6 ms|Heap Sort: 128 ms|
Testing for Array 6:Quick Sort: 17 ms|Quick Sort 4: 6 ms|Quick Sort 5: 6 ms|Quick Sort 6: 6 ms|Heap Sort: 124 ms|
Testing for Array 7:Quick Sort: 17 ms|Quick Sort 4: 9 ms|Quick Sort 5: 9 ms|Quick Sort 6: 9 ms|Heap Sort: 139 ms|
Testing for Array 8:Quick Sort: 16 ms|Quick Sort 4: 7 ms|Quick Sort 5: 8 ms|Quick Sort 6: 7 ms|Heap Sort: 136 ms|
Testing for Array 9:Quick Sort: 22 ms|Quick Sort 4: 9 ms|Quick Sort 5: 10 ms|Quick Sort 6: 9 ms|Heap Sort: 141 ms|
Testing for Array 10:Quick Sort: 20 ms|Quick Sort 4: 8 ms|Quick Sort 5: 8 ms|Quick Sort 6: 8 ms|Heap Sort: 135 ms|
Array Quick Sort has an average runtime of 17 ms

Array Quick Sort(4) has an average runtime of 7 ms
Array Quick Sort(5) has an average runtime of 7 ms
Array Quick Sort(6) has an average runtime of 7 ms
Array Heap Sort has an average runtime of 131 ms
--Comparison on Organ-Pipe Shaped Arrays--
Testing for Array 1:Quick Sort: 140 ms|Quick Sort 4: 39 ms|Quick Sort
5: 13 ms|Quick Sort 6: 39 ms|Heap Sort: 163 ms|
Testing for Array 2:Quick Sort: 140 ms|Quick Sort 4: 8 ms|Quick Sort
5: 8 ms|Quick Sort 6: 8 ms|Heap Sort: 150 ms|
Testing for Array 3:Quick Sort: 134 ms|Quick Sort 4: 7 ms|Quick Sort
5: 9 ms|Quick Sort 6: 7 ms|Heap Sort: 148 ms|
Testing for Array 4:Quick Sort: 141 ms|Quick Sort 4: 9 ms|Quick Sort
5: 9 ms|Quick Sort 6: 9 ms|Heap Sort: 153 ms|
Testing for Array 5:Quick Sort: 138 ms|Quick Sort 4: 9 ms|Quick Sort
5: 8 ms|Quick Sort 6: 9 ms|Heap Sort: 146 ms|
Testing for Array 6:Quick Sort: 142 ms|Quick Sort 4: 7 ms|Quick Sort
5: 9 ms|Quick Sort 6: 7 ms|Heap Sort: 151 ms|
Testing for Array 7:Quick Sort: 139 ms|Quick Sort 4: 6 ms|Quick Sort
5: 8 ms|Quick Sort 6: 6 ms|Heap Sort: 150 ms|
Testing for Array 8:Quick Sort: 144 ms|Quick Sort 4: 6 ms|Quick Sort
5: 7 ms|Quick Sort 6: 6 ms|Heap Sort: 148 ms|
Testing for Array 9:Quick Sort: 143 ms|Quick Sort 4: 9 ms|Quick Sort
5: 8 ms|Quick Sort 6: 9 ms|Heap Sort: 135 ms|
Testing for Array 10:Quick Sort: 134 ms|Quick Sort 4: 8 ms|Quick Sort
5: 7 ms|Quick Sort 6: 8 ms|Heap Sort: 146 ms|
Array Quick Sort has an average runtime of 139 ms
Array Quick Sort(4) has an average runtime of 10 ms
Array Quick Sort(5) has an average runtime of 8 ms
Array Quick Sort(6) has an average runtime of 11 ms
Array Heap Sort has an average runtime of 149 ms
**//Task_4///
//**
--Task Four--
--K Exchange Sorting--K = 100
Testing for Array 1:Quick Sort: 7 ms|Heap Sort: 19 ms|Merge Sort: 278
ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 2:Quick Sort: 4 ms|Heap Sort: 21 ms|Merge Sort: 227
ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 3:Quick Sort: 3 ms|Heap Sort: 22 ms|Merge Sort: 231
ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 4:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 257
ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 5:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 252 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 6:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 222 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 7:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 226 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 8:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 273 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 9:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 247 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 10:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 235 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 11:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 218 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 12:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 245 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 13:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 223 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 14:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 222 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 15:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 231 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 16:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 240 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 17:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 283 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 18:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 243 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 19:Quick Sort: 1 ms|Heap Sort: 18 ms|Merge Sort: 211 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 20:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 229 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 21:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 254 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 22:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 244 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 23:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 228 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 24:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 231 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 25:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 204 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|

Testing for Array 26:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 205 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 27:Quick Sort: 1 ms|Heap Sort: 21 ms|Merge Sort: 232 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 28:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 229 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 29:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 234 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 30:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 259 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 31:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 256 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 32:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 263 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 33:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 265 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 34:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 231 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 35:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 239 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 36:Quick Sort: 3 ms|Heap Sort: 17 ms|Merge Sort: 240 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 37:Quick Sort: 1 ms|Heap Sort: 18 ms|Merge Sort: 240 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 38:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 227 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 39:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 196 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 40:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 214 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 41:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 213 ms|nMerge Sort: 11 ms|Insertion Sort: 0 ms|
Testing for Array 42:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 239 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 43:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 271 ms|nMerge Sort: 165 ms|Insertion Sort: 0 ms|
Testing for Array 44:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 215 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 45:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 244 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 46:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 237 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|

Testing for Array 47:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 249 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 48:Quick Sort: 3 ms|Heap Sort: 22 ms|Merge Sort: 246 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 49:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 256 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 50:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 270 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 51:Quick Sort: 1 ms|Heap Sort: 18 ms|Merge Sort: 234 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 52:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 236 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 53:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 233 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 54:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 240 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 55:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 254 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 56:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 260 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 57:Quick Sort: 3 ms|Heap Sort: 20 ms|Merge Sort: 238 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 58:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 246 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 59:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 257 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 60:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 251 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 61:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 268 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 62:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 234 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 63:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 229 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 64:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 235 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 65:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 242 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 66:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 217 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 67:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 251 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|

Testing for Array 68:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 211 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 69:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 215 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 70:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 255 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 71:Quick Sort: 2 ms|Heap Sort: 24 ms|Merge Sort: 238 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 72:Quick Sort: 1 ms|Heap Sort: 19 ms|Merge Sort: 220 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 73:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 257 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 74:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 253 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 75:Quick Sort: 1 ms|Heap Sort: 21 ms|Merge Sort: 267 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 76:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 210 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 77:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 238 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 78:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 216 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 79:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 229 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 80:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 205 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 81:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 225 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 82:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 231 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 83:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 229 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 84:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 219 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 85:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 228 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 86:Quick Sort: 1 ms|Heap Sort: 21 ms|Merge Sort: 223 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 87:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 200 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 88:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 237 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|

Testing for Array 89:Quick Sort: 3 ms|Heap Sort: 15 ms|Merge Sort: 241 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 90:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 246 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 91:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 221 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 92:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 208 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 93:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 207 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 94:Quick Sort: 1 ms|Heap Sort: 12 ms|Merge Sort: 211 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 95:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 221 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 96:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 203 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 97:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 212 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 98:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 223 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 99:Quick Sort: 1 ms|Heap Sort: 15 ms|Merge Sort: 245 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 100:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 207 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Array Quick Sort has an average runtime of 1 ms
Array Heap Sort has an average runtime of 16 ms
Array Merge Sort has an average runtime of 235 ms
Array Natural Merge Sort has an average runtime of 7 ms
Array Insertion Sort has an average runtime of 0 ms
--K Exchange Sorting--K = 200
Testing for Array 1:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 207 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 2:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 195 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 3:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 210 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 4:Quick Sort: 3 ms|Heap Sort: 20 ms|Merge Sort: 223 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 5:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 229 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 6:Quick Sort: 1 ms|Heap Sort: 15 ms|Merge Sort: 207 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|

Testing for Array 7:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 233 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 8:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 212 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 9:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 233 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 10:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 210 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 11:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 233 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 12:Quick Sort: 1 ms|Heap Sort: 17 ms|Merge Sort: 222 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 13:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 202 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 14:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 213 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 15:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 207 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 16:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 214 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 17:Quick Sort: 1 ms|Heap Sort: 18 ms|Merge Sort: 234 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 18:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 223 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 19:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 203 ms|nMerge Sort: 172 ms|Insertion Sort: 0 ms|
Testing for Array 20:Quick Sort: 1 ms|Heap Sort: 15 ms|Merge Sort: 219 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 21:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 210 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 22:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 198 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 23:Quick Sort: 1 ms|Heap Sort: 12 ms|Merge Sort: 216 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 24:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 207 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 25:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 214 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 26:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 212 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 27:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 191 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 28:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 221 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 29:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 237 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 30:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 244 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 31:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 245 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 32:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 217 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 33:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 223 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 34:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 216 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 35:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 210 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 36:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 224 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 37:Quick Sort: 1 ms|Heap Sort: 15 ms|Merge Sort: 218 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 38:Quick Sort: 3 ms|Heap Sort: 17 ms|Merge Sort: 238 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 39:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 256 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 40:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 212 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 41:Quick Sort: 1 ms|Heap Sort: 12 ms|Merge Sort: 252 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 42:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 198 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 43:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 225 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 44:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 204 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 45:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 185 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 46:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 212 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 47:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 232 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 48:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 232 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|

Testing for Array 49:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 228 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 50:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 205 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 51:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 217 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 52:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 226 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 53:Quick Sort: 3 ms|Heap Sort: 13 ms|Merge Sort: 213 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 54:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 207 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 55:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 200 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 56:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 207 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 57:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 194 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 58:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 213 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 59:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 217 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 60:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 189 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 61:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 198 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 62:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 217 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 63:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 222 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 64:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 202 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 65:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 220 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 66:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 253 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 67:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 232 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 68:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 218 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 69:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 202 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 70:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 237 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 71:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 211 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 72:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 194 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 73:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 219 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 74:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 231 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 75:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 212 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 76:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 209 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 77:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 217 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 78:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 201 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 79:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 209 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 80:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 231 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 81:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 206 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 82:Quick Sort: 1 ms|Heap Sort: 21 ms|Merge Sort: 216 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 83:Quick Sort: 3 ms|Heap Sort: 13 ms|Merge Sort: 218 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 84:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 218 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 85:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 212 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 86:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 214 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 87:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 210 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 88:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 220 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 89:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 233 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 90:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 201 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 91:Quick Sort: 1 ms|Heap Sort: 22 ms|Merge Sort: 230 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 92:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 200 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 93:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 217 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 94:Quick Sort: 1 ms|Heap Sort: 12 ms|Merge Sort: 203 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 95:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 205 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 96:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 210 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 97:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 223 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 98:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 208 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 99:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 223 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 100:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 205 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Array Quick Sort has an average runtime of 1 ms
Array Heap Sort has an average runtime of 15 ms
Array Merge Sort has an average runtime of 216 ms
Array Natural Merge Sort has an average runtime of 7 ms
Array Insertion Sort has an average runtime of 0 ms
--K Exchange Sorting--K = 400
Testing for Array 1:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 248 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 2:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 202 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 3:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 200 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 4:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 222 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 5:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 201 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 6:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 196 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 7:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 220 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 8:Quick Sort: 1 ms|Heap Sort: 18 ms|Merge Sort: 228 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|

Testing for Array 9:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 200 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 10:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 203 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 11:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 224 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 12:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 235 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 13:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 202 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 14:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 198 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 15:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 215 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 16:Quick Sort: 3 ms|Heap Sort: 15 ms|Merge Sort: 208 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 17:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 202 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 18:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 209 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 19:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 206 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 20:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 202 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 21:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 225 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 22:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 218 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 23:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 212 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 24:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 220 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 25:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 211 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 26:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 226 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 27:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 179 ms|nMerge Sort: 153 ms|Insertion Sort: 0 ms|
Testing for Array 28:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 214 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 29:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 227 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 30:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 199 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 31:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 190 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 32:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 221 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 33:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 206 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 34:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 199 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 35:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 229 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 36:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 216 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 37:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 213 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 38:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 229 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 39:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 207 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 40:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 216 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 41:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 193 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 42:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 212 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 43:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 215 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 44:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 214 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 45:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 194 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 46:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 218 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 47:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 231 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 48:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 198 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 49:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 223 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 50:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 213 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|

Testing for Array 51:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 224 ms|nMerge Sort: 3 ms|Insertion Sort: 0 ms|
Testing for Array 52:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 219 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 53:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 199 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 54:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 207 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 55:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 248 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 56:Quick Sort: 3 ms|Heap Sort: 15 ms|Merge Sort: 213 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 57:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 220 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 58:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 230 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 59:Quick Sort: 1 ms|Heap Sort: 19 ms|Merge Sort: 214 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 60:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 214 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 61:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 182 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 62:Quick Sort: 3 ms|Heap Sort: 20 ms|Merge Sort: 231 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 63:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 228 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 64:Quick Sort: 1 ms|Heap Sort: 15 ms|Merge Sort: 228 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 65:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 222 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 66:Quick Sort: 1 ms|Heap Sort: 15 ms|Merge Sort: 225 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 67:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 208 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 68:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 214 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 69:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 229 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 70:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 232 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 71:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 228 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 72:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 195 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 73:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 243 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 74:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 227 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 75:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 225 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 76:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 232 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 77:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 205 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 78:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 195 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 79:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 234 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 80:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 250 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 81:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 249 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 82:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 233 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 83:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 251 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 84:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 271 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 85:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 248 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 86:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 246 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 87:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 208 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 88:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 229 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 89:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 210 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 90:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 196 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 91:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 203 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 92:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 196 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|

Testing for Array 93:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 214 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 94:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 224 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 95:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 207 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 96:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 224 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 97:Quick Sort: 1 ms|Heap Sort: 17 ms|Merge Sort: 216 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 98:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 220 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 99:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 223 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 100:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 188 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Array Quick Sort has an average runtime of 1 ms
Array Heap Sort has an average runtime of 15 ms
Array Merge Sort has an average runtime of 216 ms
Array Natural Merge Sort has an average runtime of 6 ms
Array Insertion Sort has an average runtime of 0 ms
--K Exchange Sorting--K = 800
Testing for Array 1:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 215 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 2:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 199 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 3:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 214 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 4:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 233 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 5:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 211 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 6:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 208 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 7:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 223 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 8:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 204 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 9:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 212 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 10:Quick Sort: 1 ms|Heap Sort: 17 ms|Merge Sort: 243 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 11:Quick Sort: 1 ms|Heap Sort: 18 ms|Merge Sort: 207 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 12:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 196 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 13:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 252 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 14:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 236 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 15:Quick Sort: 2 ms|Heap Sort: 11 ms|Merge Sort: 222 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 16:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 233 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 17:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 226 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 18:Quick Sort: 2 ms|Heap Sort: 11 ms|Merge Sort: 208 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 19:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 200 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 20:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 206 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 21:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 233 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 22:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 200 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 23:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 195 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 24:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 213 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 25:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 216 ms|nMerge Sort: 3 ms|Insertion Sort: 0 ms|
Testing for Array 26:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 199 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 27:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 214 ms|nMerge Sort: 16 ms|Insertion Sort: 0 ms|
Testing for Array 28:Quick Sort: 3 ms|Heap Sort: 22 ms|Merge Sort: 237 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 29:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 232 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 30:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 224 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 31:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 237 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|

Testing for Array 32:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 216 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 33:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 197 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 34:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 219 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 35:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 256 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 36:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 208 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 37:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 206 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 38:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 238 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 39:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 202 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 40:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 190 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 41:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 210 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 42:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 255 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 43:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 187 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 44:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 215 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 45:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 218 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 46:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 233 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 47:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 221 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 48:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 225 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 49:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 241 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 50:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 204 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 51:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 215 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 52:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 203 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 53:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 222 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 54:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 244 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 55:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 213 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 56:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 216 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 57:Quick Sort: 1 ms|Heap Sort: 15 ms|Merge Sort: 206 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 58:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 216 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 59:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 216 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 60:Quick Sort: 1 ms|Heap Sort: 15 ms|Merge Sort: 222 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 61:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 191 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 62:Quick Sort: 3 ms|Heap Sort: 13 ms|Merge Sort: 195 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 63:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 214 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 64:Quick Sort: 3 ms|Heap Sort: 22 ms|Merge Sort: 200 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 65:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 203 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 66:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 259 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 67:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 214 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 68:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 206 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 69:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 250 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 70:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 239 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 71:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 223 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 72:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 244 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 73:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 246 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|

Testing for Array 74:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 216 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 75:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 203 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 76:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 246 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 77:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 260 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 78:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 215 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 79:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 221 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 80:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 221 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 81:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 221 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 82:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 190 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 83:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 219 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 84:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 212 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 85:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 228 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 86:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 205 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 87:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 194 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 88:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 219 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 89:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 220 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 90:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 244 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 91:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 211 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 92:Quick Sort: 1 ms|Heap Sort: 17 ms|Merge Sort: 217 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 93:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 238 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 94:Quick Sort: 1 ms|Heap Sort: 17 ms|Merge Sort: 233 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 95:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 210 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 96:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 215 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 97:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 212 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 98:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 215 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 99:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 214 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 100:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 189 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Array Quick Sort has an average runtime of 1 ms
Array Heap Sort has an average runtime of 16 ms
Array Merge Sort has an average runtime of 218 ms
Array Natural Merge Sort has an average runtime of 5 ms
Array Insertion Sort has an average runtime of 0 ms
--K Exchange Sorting--K = 1600
Testing for Array 1:Quick Sort: 1 ms|Heap Sort: 22 ms|Merge Sort: 227 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 2:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 201 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 3:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 213 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 4:Quick Sort: 1 ms|Heap Sort: 17 ms|Merge Sort: 213 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 5:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 214 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 6:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 244 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 7:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 245 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 8:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 213 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 9:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 236 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 10:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 207 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 11:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 237 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 12:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 226 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 13:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 214 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 14:Quick Sort: 2 ms|Heap Sort: 11 ms|Merge Sort: 220 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 15:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 243 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 16:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 208 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 17:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 214 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 18:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 222 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 19:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 212 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 20:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 263 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 21:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 213 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 22:Quick Sort: 3 ms|Heap Sort: 16 ms|Merge Sort: 215 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 23:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 240 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 24:Quick Sort: 1 ms|Heap Sort: 12 ms|Merge Sort: 215 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 25:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 228 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 26:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 202 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 27:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 211 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 28:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 220 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 29:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 200 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 30:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 211 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 31:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 239 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 32:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 253 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 33:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 176 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|

Testing for Array 34:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 211 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 35:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 218 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 36:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 215 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 37:Quick Sort: 1 ms|Heap Sort: 18 ms|Merge Sort: 219 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 38:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 228 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 39:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 186 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 40:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 203 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 41:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 212 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 42:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 207 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 43:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 236 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 44:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 239 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 45:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 223 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 46:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 216 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 47:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 228 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 48:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 227 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 49:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 228 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 50:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 235 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 51:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 245 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 52:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 215 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 53:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 229 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 54:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 224 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 55:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 236 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 56:Quick Sort: 1 ms|Heap Sort: 17 ms|Merge Sort: 205 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 57:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 207 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 58:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 204 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 59:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 218 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 60:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 189 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 61:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 226 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 62:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 227 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 63:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 223 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 64:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 215 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 65:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 235 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 66:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 220 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 67:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 214 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 68:Quick Sort: 1 ms|Heap Sort: 18 ms|Merge Sort: 218 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 69:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 227 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 70:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 213 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 71:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 249 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 72:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 202 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 73:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 279 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 74:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 221 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 75:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 198 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 76:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 211 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 77:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 198 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 78:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 213 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 79:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 225 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 80:Quick Sort: 3 ms|Heap Sort: 22 ms|Merge Sort: 228 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 81:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 220 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 82:Quick Sort: 1 ms|Heap Sort: 19 ms|Merge Sort: 242 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 83:Quick Sort: 1 ms|Heap Sort: 21 ms|Merge Sort: 224 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 84:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 224 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 85:Quick Sort: 1 ms|Heap Sort: 22 ms|Merge Sort: 221 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 86:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 218 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 87:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 203 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 88:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 221 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 89:Quick Sort: 1 ms|Heap Sort: 17 ms|Merge Sort: 216 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 90:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 195 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 91:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 211 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 92:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 191 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 93:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 223 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 94:Quick Sort: 1 ms|Heap Sort: 15 ms|Merge Sort: 245 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 95:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 215 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 96:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 225 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|

Testing for Array 97:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 246 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 98:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 227 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 99:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 233 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 100:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 212 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Array Quick Sort has an average runtime of 1 ms
Array Heap Sort has an average runtime of 16 ms
Array Merge Sort has an average runtime of 220 ms
Array Natural Merge Sort has an average runtime of 5 ms
Array Insertion Sort has an average runtime of 0 ms
--K Exchange Sorting--K = 3200
Testing for Array 1:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 203 ms|nMerge Sort: 12 ms|Insertion Sort: 0 ms|
Testing for Array 2:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 222 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 3:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 244 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 4:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 232 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 5:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 222 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 6:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 233 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 7:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 221 ms|nMerge Sort: 11 ms|Insertion Sort: 0 ms|
Testing for Array 8:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 234 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 9:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 203 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 10:Quick Sort: 3 ms|Heap Sort: 18 ms|Merge Sort: 225 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 11:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 246 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 12:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 250 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 13:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 197 ms|nMerge Sort: 12 ms|Insertion Sort: 0 ms|
Testing for Array 14:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 215 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|

Testing for Array 15:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 222 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 16:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 195 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 17:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 222 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 18:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 240 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 19:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 206 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 20:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 244 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 21:Quick Sort: 1 ms|Heap Sort: 15 ms|Merge Sort: 214 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 22:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 203 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 23:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 198 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 24:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 217 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 25:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 215 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 26:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 220 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 27:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 236 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 28:Quick Sort: 1 ms|Heap Sort: 18 ms|Merge Sort: 197 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 29:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 238 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 30:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 205 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 31:Quick Sort: 3 ms|Heap Sort: 23 ms|Merge Sort: 209 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 32:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 226 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 33:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 218 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 34:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 220 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 35:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 239 ms|nMerge Sort: 13 ms|Insertion Sort: 0 ms|

Testing for Array 36:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 219 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 37:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 232 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 38:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 206 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 39:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 241 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 40:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 191 ms|nMerge Sort: 11 ms|Insertion Sort: 0 ms|
Testing for Array 41:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 195 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 42:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 213 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 43:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 210 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 44:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 202 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 45:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 192 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 46:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 205 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 47:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 226 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 48:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 200 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 49:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 209 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 50:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 198 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 51:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 206 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 52:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 203 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 53:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 228 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 54:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 212 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 55:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 224 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 56:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 209 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 57:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 210 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 58:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 222 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 59:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 233 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 60:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 194 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 61:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 211 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 62:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 198 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 63:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 207 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 64:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 204 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 65:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 223 ms|nMerge Sort: 11 ms|Insertion Sort: 0 ms|
Testing for Array 66:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 208 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 67:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 232 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 68:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 227 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 69:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 206 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 70:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 205 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 71:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 222 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 72:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 229 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 73:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 203 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 74:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 232 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 75:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 219 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 76:Quick Sort: 1 ms|Heap Sort: 15 ms|Merge Sort: 198 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 77:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 206 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|

Testing for Array 78:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 219 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 79:Quick Sort: 3 ms|Heap Sort: 21 ms|Merge Sort: 189 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 80:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 212 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 81:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 184 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 82:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 212 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 83:Quick Sort: 3 ms|Heap Sort: 12 ms|Merge Sort: 196 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 84:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 209 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 85:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 209 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 86:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 210 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 87:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 237 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 88:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 217 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 89:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 203 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 90:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 216 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 91:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 230 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 92:Quick Sort: 1 ms|Heap Sort: 22 ms|Merge Sort: 222 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 93:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 222 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 94:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 220 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 95:Quick Sort: 1 ms|Heap Sort: 15 ms|Merge Sort: 231 ms|nMerge Sort: 13 ms|Insertion Sort: 0 ms|
Testing for Array 96:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 204 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 97:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 220 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 98:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 199 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|

Testing for Array 99:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 229 ms|nMerge Sort: 12 ms|Insertion Sort: 0 ms|
Testing for Array 100:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 219 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Array Quick Sort has an average runtime of 1 ms
Array Heap Sort has an average runtime of 15 ms
Array Merge Sort has an average runtime of 215 ms
Array Natural Merge Sort has an average runtime of 6 ms
Array Insertion Sort has an average runtime of 0 ms
--K Distance Sorting--K = 10
Testing for Array 1:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 227 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 2:Quick Sort: 1 ms|Heap Sort: 17 ms|Merge Sort: 199 ms|nMerge Sort: 173 ms|Insertion Sort: 0 ms|
Testing for Array 3:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 205 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 4:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 235 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 5:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 239 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 6:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 228 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 7:Quick Sort: 1 ms|Heap Sort: 19 ms|Merge Sort: 225 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 8:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 208 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 9:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 216 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 10:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 210 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 11:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 211 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 12:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 238 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 13:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 221 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 14:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 206 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 15:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 239 ms|nMerge Sort: 11 ms|Insertion Sort: 0 ms|
Testing for Array 16:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 219 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|

Testing for Array 17:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 238 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 18:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 232 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 19:Quick Sort: 3 ms|Heap Sort: 22 ms|Merge Sort: 228 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 20:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 218 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 21:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 209 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 22:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 228 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 23:Quick Sort: 1 ms|Heap Sort: 21 ms|Merge Sort: 246 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 24:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 236 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 25:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 240 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 26:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 239 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 27:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 224 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 28:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 244 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 29:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 197 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 30:Quick Sort: 1 ms|Heap Sort: 15 ms|Merge Sort: 215 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 31:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 214 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 32:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 183 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 33:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 223 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 34:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 217 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 35:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 213 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 36:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 213 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 37:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 231 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|

Testing for Array 38:Quick Sort: 3 ms|Heap Sort: 22 ms|Merge Sort: 243 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 39:Quick Sort: 1 ms|Heap Sort: 19 ms|Merge Sort: 190 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 40:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 219 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 41:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 215 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 42:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 199 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 43:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 213 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 44:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 228 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 45:Quick Sort: 3 ms|Heap Sort: 18 ms|Merge Sort: 207 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 46:Quick Sort: 1 ms|Heap Sort: 15 ms|Merge Sort: 236 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 47:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 210 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 48:Quick Sort: 1 ms|Heap Sort: 17 ms|Merge Sort: 226 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 49:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 223 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 50:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 246 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 51:Quick Sort: 1 ms|Heap Sort: 17 ms|Merge Sort: 228 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 52:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 246 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 53:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 244 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 54:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 184 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 55:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 206 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 56:Quick Sort: 1 ms|Heap Sort: 17 ms|Merge Sort: 198 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 57:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 229 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 58:Quick Sort: 1 ms|Heap Sort: 18 ms|Merge Sort: 212 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|

Testing for Array 59:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 217 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 60:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 230 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 61:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 211 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 62:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 228 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 63:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 216 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 64:Quick Sort: 1 ms|Heap Sort: 17 ms|Merge Sort: 203 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 65:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 200 ms|nMerge Sort: 11 ms|Insertion Sort: 0 ms|
Testing for Array 66:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 211 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 67:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 221 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 68:Quick Sort: 3 ms|Heap Sort: 19 ms|Merge Sort: 202 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 69:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 210 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 70:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 205 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 71:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 228 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 72:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 224 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 73:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 237 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 74:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 227 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 75:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 217 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 76:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 232 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 77:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 214 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 78:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 202 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 79:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 208 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 80:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 213 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 81:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 225 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 82:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 218 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 83:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 225 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 84:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 212 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 85:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 196 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 86:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 193 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 87:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 227 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 88:Quick Sort: 1 ms|Heap Sort: 18 ms|Merge Sort: 230 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 89:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 221 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 90:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 232 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 91:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 228 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 92:Quick Sort: 1 ms|Heap Sort: 18 ms|Merge Sort: 199 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 93:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 218 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 94:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 207 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 95:Quick Sort: 1 ms|Heap Sort: 21 ms|Merge Sort: 239 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 96:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 231 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 97:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 221 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 98:Quick Sort: 3 ms|Heap Sort: 22 ms|Merge Sort: 190 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 99:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 247 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 100:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 254 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Array Quick Sort has an average runtime of 1 ms

Array Heap Sort has an average runtime of 16 ms
Array Merge Sort has an average runtime of 219 ms
Array Natural Merge Sort has an average runtime of 7 ms
Array Insertion Sort has an average runtime of 0 ms
--K Distance Sorting--K = 20
Testing for Array 1:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 235 ms|nMerge Sort: 27 ms|Insertion Sort: 0 ms|
Testing for Array 2:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 225 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 3:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 212 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 4:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 212 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 5:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 205 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 6:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 199 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 7:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 237 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 8:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 206 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 9:Quick Sort: 3 ms|Heap Sort: 15 ms|Merge Sort: 215 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 10:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 212 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 11:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 209 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 12:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 215 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 13:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 200 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 14:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 231 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 15:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 213 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 16:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 242 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 17:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 208 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 18:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 220 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 19:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 215 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|

Testing for Array 20:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 221 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 21:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 231 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 22:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 261 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 23:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 229 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 24:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 215 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 25:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 221 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 26:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 221 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 27:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 238 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 28:Quick Sort: 1 ms|Heap Sort: 19 ms|Merge Sort: 214 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 29:Quick Sort: 3 ms|Heap Sort: 21 ms|Merge Sort: 208 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 30:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 218 ms|nMerge Sort: 12 ms|Insertion Sort: 0 ms|
Testing for Array 31:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 202 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 32:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 204 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 33:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 200 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 34:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 220 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 35:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 207 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 36:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 206 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 37:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 195 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 38:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 186 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 39:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 191 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 40:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 217 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|

Testing for Array 41:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 218 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 42:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 217 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 43:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 197 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 44:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 246 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 45:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 245 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 46:Quick Sort: 1 ms|Heap Sort: 18 ms|Merge Sort: 218 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 47:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 207 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 48:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 204 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 49:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 223 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 50:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 231 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 51:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 222 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 52:Quick Sort: 3 ms|Heap Sort: 12 ms|Merge Sort: 211 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 53:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 221 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 54:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 210 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 55:Quick Sort: 1 ms|Heap Sort: 18 ms|Merge Sort: 196 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 56:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 249 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 57:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 224 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 58:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 219 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 59:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 254 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 60:Quick Sort: 3 ms|Heap Sort: 18 ms|Merge Sort: 197 ms|nMerge Sort: 13 ms|Insertion Sort: 0 ms|
Testing for Array 61:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 215 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 62:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 206 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 63:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 210 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 64:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 202 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 65:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 227 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 66:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 230 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 67:Quick Sort: 3 ms|Heap Sort: 19 ms|Merge Sort: 209 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 68:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 234 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 69:Quick Sort: 1 ms|Heap Sort: 18 ms|Merge Sort: 216 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 70:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 209 ms|nMerge Sort: 11 ms|Insertion Sort: 0 ms|
Testing for Array 71:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 207 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 72:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 211 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 73:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 208 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 74:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 218 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 75:Quick Sort: 1 ms|Heap Sort: 15 ms|Merge Sort: 209 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 76:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 214 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 77:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 210 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 78:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 227 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 79:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 220 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 80:Quick Sort: 1 ms|Heap Sort: 12 ms|Merge Sort: 200 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 81:Quick Sort: 3 ms|Heap Sort: 21 ms|Merge Sort: 232 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 82:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 211 ms|nMerge Sort: 11 ms|Insertion Sort: 0 ms|

Testing for Array 83:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort:
217 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 84:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort:
231 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 85:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort:
224 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 86:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort:
230 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 87:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort:
240 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 88:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort:
196 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 89:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort:
201 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 90:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort:
208 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 91:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort:
212 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 92:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort:
196 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 93:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort:
201 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 94:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort:
201 ms|nMerge Sort: 13 ms|Insertion Sort: 0 ms|
Testing for Array 95:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort:
213 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 96:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort:
192 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 97:Quick Sort: 1 ms|Heap Sort: 15 ms|Merge Sort:
188 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 98:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort:
234 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 99:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort:
226 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 100:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort:
217 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Array Quick Sort has an average runtime of 1 ms
Array Heap Sort has an average runtime of 15 ms
Array Merge Sort has an average runtime of 215 ms
Array Natural Merge Sort has an average runtime of 6 ms
Array Insertion Sort has an average runtime of 0 ms
--K Distance Sorting--K = 40

Testing for Array 1:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 192 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 2:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 208 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 3:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 197 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 4:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 205 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 5:Quick Sort: 1 ms|Heap Sort: 17 ms|Merge Sort: 194 ms|nMerge Sort: 13 ms|Insertion Sort: 0 ms|
Testing for Array 6:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 233 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 7:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 197 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 8:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 220 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 9:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 246 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 10:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 230 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 11:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 228 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 12:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 210 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 13:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 232 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 14:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 222 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 15:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 240 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 16:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 220 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 17:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 226 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 18:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 213 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 19:Quick Sort: 3 ms|Heap Sort: 17 ms|Merge Sort: 247 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 20:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 209 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 21:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 210 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 22:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 210 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 23:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 215 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 24:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 207 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 25:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 217 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 26:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 214 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 27:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 207 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 28:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 195 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 29:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 239 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 30:Quick Sort: 1 ms|Heap Sort: 19 ms|Merge Sort: 200 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 31:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 216 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 32:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 229 ms|nMerge Sort: 13 ms|Insertion Sort: 0 ms|
Testing for Array 33:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 201 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 34:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 234 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 35:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 195 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 36:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 206 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 37:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 222 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 38:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 214 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 39:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 229 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 40:Quick Sort: 1 ms|Heap Sort: 17 ms|Merge Sort: 202 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 41:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 227 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 42:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 228 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 43:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 230 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 44:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 219 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 45:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 233 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 46:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 195 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 47:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 202 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 48:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 211 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 49:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 205 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 50:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 213 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 51:Quick Sort: 1 ms|Heap Sort: 15 ms|Merge Sort: 231 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 52:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 267 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 53:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 231 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 54:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 242 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 55:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 243 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 56:Quick Sort: 3 ms|Heap Sort: 14 ms|Merge Sort: 223 ms|nMerge Sort: 14 ms|Insertion Sort: 0 ms|
Testing for Array 57:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 246 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 58:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 234 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 59:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 197 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 60:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 210 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 61:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 230 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 62:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 213 ms|nMerge Sort: 13 ms|Insertion Sort: 0 ms|
Testing for Array 63:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 237 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 64:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 229 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 65:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 232 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|

Testing for Array 66:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 216 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|

Testing for Array 67:Quick Sort: 3 ms|Heap Sort: 14 ms|Merge Sort: 234 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 68:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 226 ms|nMerge Sort: 11 ms|Insertion Sort: 0 ms|

Testing for Array 69:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 205 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|

Testing for Array 70:Quick Sort: 1 ms|Heap Sort: 21 ms|Merge Sort: 232 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 71:Quick Sort: 1 ms|Heap Sort: 18 ms|Merge Sort: 212 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|

Testing for Array 72:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 191 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|

Testing for Array 73:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 219 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 74:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 262 ms|nMerge Sort: 14 ms|Insertion Sort: 0 ms|

Testing for Array 75:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 267 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|

Testing for Array 76:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 207 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|

Testing for Array 77:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 214 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 78:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 219 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|

Testing for Array 79:Quick Sort: 1 ms|Heap Sort: 21 ms|Merge Sort: 217 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|

Testing for Array 80:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 217 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 81:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 213 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 82:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 216 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|

Testing for Array 83:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 225 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|

Testing for Array 84:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 248 ms|nMerge Sort: 13 ms|Insertion Sort: 0 ms|

Testing for Array 85:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 212 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 86:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 233 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 87:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 233 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 88:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 213 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 89:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 206 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 90:Quick Sort: 1 ms|Heap Sort: 17 ms|Merge Sort: 217 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 91:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 199 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 92:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 220 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 93:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 236 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 94:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 224 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 95:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 199 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 96:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 240 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 97:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 215 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 98:Quick Sort: 1 ms|Heap Sort: 12 ms|Merge Sort: 201 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 99:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 242 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 100:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 193 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Array Quick Sort has an average runtime of 1 ms
Array Heap Sort has an average runtime of 15 ms
Array Merge Sort has an average runtime of 219 ms
Array Natural Merge Sort has an average runtime of 6 ms
Array Insertion Sort has an average runtime of 0 ms
--K Distance Sorting--K = 80
Testing for Array 1:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 213 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 2:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 201 ms|nMerge Sort: 173 ms|Insertion Sort: 0 ms|

Testing for Array 3:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 223 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 4:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 225 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 5:Quick Sort: 1 ms|Heap Sort: 21 ms|Merge Sort: 218 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 6:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 216 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 7:Quick Sort: 1 ms|Heap Sort: 18 ms|Merge Sort: 242 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 8:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 237 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 9:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 199 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 10:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 185 ms|nMerge Sort: 11 ms|Insertion Sort: 0 ms|
Testing for Array 11:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 226 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 12:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 234 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 13:Quick Sort: 1 ms|Heap Sort: 17 ms|Merge Sort: 226 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 14:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 218 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 15:Quick Sort: 3 ms|Heap Sort: 14 ms|Merge Sort: 239 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 16:Quick Sort: 1 ms|Heap Sort: 12 ms|Merge Sort: 218 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 17:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 204 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 18:Quick Sort: 1 ms|Heap Sort: 15 ms|Merge Sort: 255 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 19:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 208 ms|nMerge Sort: 13 ms|Insertion Sort: 0 ms|
Testing for Array 20:Quick Sort: 3 ms|Heap Sort: 22 ms|Merge Sort: 250 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 21:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 215 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 22:Quick Sort: 1 ms|Heap Sort: 12 ms|Merge Sort: 211 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 23:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 220 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 24:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 206 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 25:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 219 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 26:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 225 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 27:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 206 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 28:Quick Sort: 1 ms|Heap Sort: 21 ms|Merge Sort: 246 ms|nMerge Sort: 11 ms|Insertion Sort: 0 ms|
Testing for Array 29:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 214 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 30:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 194 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 31:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 238 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 32:Quick Sort: 1 ms|Heap Sort: 21 ms|Merge Sort: 210 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 33:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 214 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 34:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 193 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 35:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 204 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 36:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 192 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 37:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 204 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 38:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 218 ms|nMerge Sort: 13 ms|Insertion Sort: 0 ms|
Testing for Array 39:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 199 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 40:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 215 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 41:Quick Sort: 2 ms|Heap Sort: 11 ms|Merge Sort: 219 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 42:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 223 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 43:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 215 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 44:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 182 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|

Testing for Array 45:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 201 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 46:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 211 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 47:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 210 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 48:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 193 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 49:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 208 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 50:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 191 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 51:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 227 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 52:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 223 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 53:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 193 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 54:Quick Sort: 1 ms|Heap Sort: 17 ms|Merge Sort: 203 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 55:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 217 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 56:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 240 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 57:Quick Sort: 0 ms|Heap Sort: 13 ms|Merge Sort: 236 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 58:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 209 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 59:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 214 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 60:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 224 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 61:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 218 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 62:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 219 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 63:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 226 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 64:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 205 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 65:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 229 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|

Testing for Array 66:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 213 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 67:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 200 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 68:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 212 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 69:Quick Sort: 1 ms|Heap Sort: 21 ms|Merge Sort: 221 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 70:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 272 ms|nMerge Sort: 11 ms|Insertion Sort: 0 ms|
Testing for Array 71:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 252 ms|nMerge Sort: 3 ms|Insertion Sort: 0 ms|
Testing for Array 72:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 216 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 73:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 199 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 74:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 228 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 75:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 196 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 76:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 193 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 77:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 215 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 78:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 196 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 79:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 220 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 80:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 215 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 81:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 238 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 82:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 235 ms|nMerge Sort: 12 ms|Insertion Sort: 0 ms|
Testing for Array 83:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 233 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 84:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 210 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 85:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 217 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 86:Quick Sort: 1 ms|Heap Sort: 19 ms|Merge Sort: 245 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 87:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 194 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 88:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 249 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 89:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 254 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 90:Quick Sort: 1 ms|Heap Sort: 22 ms|Merge Sort: 195 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 91:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 224 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 92:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 206 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 93:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 215 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 94:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 193 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 95:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 208 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 96:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 212 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 97:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 217 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 98:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 197 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 99:Quick Sort: 3 ms|Heap Sort: 22 ms|Merge Sort: 255 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 100:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 196 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Array Quick Sort has an average runtime of 1 ms
Array Heap Sort has an average runtime of 15 ms
Array Merge Sort has an average runtime of 216 ms
Array Natural Merge Sort has an average runtime of 7 ms
Array Insertion Sort has an average runtime of 0 ms
--K Distance Sorting--K = 160
Testing for Array 1:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 197 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 2:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 209 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 3:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 230 ms|nMerge Sort: 173 ms|Insertion Sort: 0 ms|
Testing for Array 4:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 216 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 5:Quick Sort: 1 ms|Heap Sort: 19 ms|Merge Sort: 241 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 6:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 212 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 7:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 263 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 8:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 212 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 9:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 209 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 10:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 229 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 11:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 207 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 12:Quick Sort: 1 ms|Heap Sort: 21 ms|Merge Sort: 217 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 13:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 213 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 14:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 203 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 15:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 225 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 16:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 211 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 17:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 219 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 18:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 237 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 19:Quick Sort: 1 ms|Heap Sort: 17 ms|Merge Sort: 223 ms|nMerge Sort: 12 ms|Insertion Sort: 0 ms|
Testing for Array 20:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 214 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 21:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 225 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 22:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 219 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 23:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 219 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 24:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 229 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 25:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 219 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 26:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 207 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 27:Quick Sort: 2 ms|Heap Sort: 11 ms|Merge Sort: 234 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 28:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 201 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 29:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 200 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 30:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 190 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 31:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 220 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 32:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 200 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 33:Quick Sort: 3 ms|Heap Sort: 17 ms|Merge Sort: 201 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 34:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 201 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 35:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 214 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 36:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 236 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 37:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 240 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 38:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 217 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 39:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 214 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 40:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 203 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 41:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 216 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 42:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 227 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 43:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 233 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 44:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 223 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 45:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 216 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 46:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 232 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|

Testing for Array 47:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 209 ms|nMerge Sort: 13 ms|Insertion Sort: 0 ms|
Testing for Array 48:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 212 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 49:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 243 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 50:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 227 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 51:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 203 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 52:Quick Sort: 2 ms|Heap Sort: 21 ms|Merge Sort: 228 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 53:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 204 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 54:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 204 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 55:Quick Sort: 3 ms|Heap Sort: 14 ms|Merge Sort: 214 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 56:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 210 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 57:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 189 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 58:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 194 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 59:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 220 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 60:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 194 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 61:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 227 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 62:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 190 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 63:Quick Sort: 1 ms|Heap Sort: 21 ms|Merge Sort: 228 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 64:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 229 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 65:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 205 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 66:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 200 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 67:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 210 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 68:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 204 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 69:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 185 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 70:Quick Sort: 1 ms|Heap Sort: 18 ms|Merge Sort: 220 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 71:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 215 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 72:Quick Sort: 1 ms|Heap Sort: 21 ms|Merge Sort: 216 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 73:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 217 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 74:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 241 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 75:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 216 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 76:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 206 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 77:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 223 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 78:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 202 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 79:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 199 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 80:Quick Sort: 1 ms|Heap Sort: 21 ms|Merge Sort: 203 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 81:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 220 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 82:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 245 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 83:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 242 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 84:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 202 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 85:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 232 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 86:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 223 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 87:Quick Sort: 3 ms|Heap Sort: 13 ms|Merge Sort: 202 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 88:Quick Sort: 3 ms|Heap Sort: 22 ms|Merge Sort: 213 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|

Testing for Array 89:Quick Sort: 3 ms|Heap Sort: 21 ms|Merge Sort: 244 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 90:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 197 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 91:Quick Sort: 3 ms|Heap Sort: 19 ms|Merge Sort: 253 ms|nMerge Sort: 12 ms|Insertion Sort: 0 ms|
Testing for Array 92:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 232 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 93:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 212 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 94:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 230 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 95:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 218 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 96:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 245 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 97:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 240 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 98:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 226 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 99:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 224 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 100:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 219 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Array Quick Sort has an average runtime of 1 ms
Array Heap Sort has an average runtime of 15 ms
Array Merge Sort has an average runtime of 217 ms
Array Natural Merge Sort has an average runtime of 7 ms
Array Insertion Sort has an average runtime of 0 ms
--K Distance Sorting--K = 320
Testing for Array 1:Quick Sort: 1 ms|Heap Sort: 15 ms|Merge Sort: 225 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 2:Quick Sort: 3 ms|Heap Sort: 14 ms|Merge Sort: 221 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 3:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 201 ms|nMerge Sort: 172 ms|Insertion Sort: 0 ms|
Testing for Array 4:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 218 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 5:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 216 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 6:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 215 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|

Testing for Array 7:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 224 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|

Testing for Array 8:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 204 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|

Testing for Array 9:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 217 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 10:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 201 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 11:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 242 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 12:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 214 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|

Testing for Array 13:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 227 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|

Testing for Array 14:Quick Sort: 1 ms|Heap Sort: 12 ms|Merge Sort: 220 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|

Testing for Array 15:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 214 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 16:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 231 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|

Testing for Array 17:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 204 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 18:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 210 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|

Testing for Array 19:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 232 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|

Testing for Array 20:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 238 ms|nMerge Sort: 12 ms|Insertion Sort: 0 ms|

Testing for Array 21:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 209 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|

Testing for Array 22:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 225 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 23:Quick Sort: 1 ms|Heap Sort: 12 ms|Merge Sort: 220 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|

Testing for Array 24:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 203 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|

Testing for Array 25:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 217 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|

Testing for Array 26:Quick Sort: 1 ms|Heap Sort: 23 ms|Merge Sort: 217 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|

Testing for Array 27:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 202 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 28:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 209 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 29:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 216 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 30:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 226 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 31:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 208 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 32:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 202 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 33:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 209 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 34:Quick Sort: 1 ms|Heap Sort: 21 ms|Merge Sort: 221 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 35:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 200 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 36:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 215 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 37:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 212 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 38:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 206 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 39:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 227 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 40:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 180 ms|nMerge Sort: 13 ms|Insertion Sort: 0 ms|
Testing for Array 41:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 212 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 42:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 224 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 43:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 234 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 44:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 239 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 45:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 237 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 46:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 210 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 47:Quick Sort: 1 ms|Heap Sort: 17 ms|Merge Sort: 225 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 48:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 204 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 49:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 235 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 50:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 218 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 51:Quick Sort: 3 ms|Heap Sort: 19 ms|Merge Sort: 204 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 52:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 191 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 53:Quick Sort: 2 ms|Heap Sort: 17 ms|Merge Sort: 199 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 54:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 219 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 55:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 219 ms|nMerge Sort: 9 ms|Insertion Sort: 0 ms|
Testing for Array 56:Quick Sort: 3 ms|Heap Sort: 14 ms|Merge Sort: 224 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 57:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 199 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 58:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 226 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 59:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 203 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 60:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 221 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 61:Quick Sort: 2 ms|Heap Sort: 19 ms|Merge Sort: 234 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 62:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 240 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 63:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 221 ms|nMerge Sort: 13 ms|Insertion Sort: 0 ms|
Testing for Array 64:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 224 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 65:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 206 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 66:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 236 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 67:Quick Sort: 1 ms|Heap Sort: 15 ms|Merge Sort: 223 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 68:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 274 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 69:Quick Sort: 1 ms|Heap Sort: 16 ms|Merge Sort: 264 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|

Testing for Array 70:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 253 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 71:Quick Sort: 1 ms|Heap Sort: 22 ms|Merge Sort: 282 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|
Testing for Array 72:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 243 ms|nMerge Sort: 10 ms|Insertion Sort: 0 ms|
Testing for Array 73:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 268 ms|nMerge Sort: 6 ms|Insertion Sort: 0 ms|
Testing for Array 74:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 189 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 75:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 202 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 76:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 221 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 77:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 209 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 78:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 218 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 79:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 192 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 80:Quick Sort: 2 ms|Heap Sort: 16 ms|Merge Sort: 206 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 81:Quick Sort: 3 ms|Heap Sort: 18 ms|Merge Sort: 202 ms|nMerge Sort: 12 ms|Insertion Sort: 0 ms|
Testing for Array 82:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 234 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 83:Quick Sort: 1 ms|Heap Sort: 19 ms|Merge Sort: 198 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 84:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 252 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 85:Quick Sort: 2 ms|Heap Sort: 14 ms|Merge Sort: 203 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 86:Quick Sort: 1 ms|Heap Sort: 20 ms|Merge Sort: 227 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 87:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 199 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 88:Quick Sort: 2 ms|Heap Sort: 15 ms|Merge Sort: 215 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 89:Quick Sort: 2 ms|Heap Sort: 18 ms|Merge Sort: 233 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Testing for Array 90:Quick Sort: 2 ms|Heap Sort: 13 ms|Merge Sort: 244 ms|nMerge Sort: 8 ms|Insertion Sort: 0 ms|

Testing for Array 91:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 218 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 92:Quick Sort: 1 ms|Heap Sort: 14 ms|Merge Sort: 250 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 93:Quick Sort: 2 ms|Heap Sort: 23 ms|Merge Sort: 216 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 94:Quick Sort: 2 ms|Heap Sort: 20 ms|Merge Sort: 204 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 95:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 215 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 96:Quick Sort: 3 ms|Heap Sort: 18 ms|Merge Sort: 231 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 97:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 199 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 98:Quick Sort: 1 ms|Heap Sort: 13 ms|Merge Sort: 212 ms|nMerge Sort: 4 ms|Insertion Sort: 0 ms|
Testing for Array 99:Quick Sort: 2 ms|Heap Sort: 12 ms|Merge Sort: 249 ms|nMerge Sort: 7 ms|Insertion Sort: 0 ms|
Testing for Array 100:Quick Sort: 2 ms|Heap Sort: 22 ms|Merge Sort: 196 ms|nMerge Sort: 5 ms|Insertion Sort: 0 ms|
Array Quick Sort has an average runtime of 1 ms
Array Heap Sort has an average runtime of 16 ms
Array Merge Sort has an average runtime of 219 ms
Array Natural Merge Sort has an average runtime of 7 ms
Array Insertion Sort has an average runtime of 0 ms
BUILD SUCCESSFUL (total time: 22 minutes 24 seconds)