Different Algorithms Timing Results

Vector length: 100,000
Order of numbers: Ascending
Range of numbers: 0 - 1,000,000

Algorithm	Time
Shell Sort	7ms
Insertion Sort	16ms
Heap Sort	52ms
BST Sort	91ms
Merge Sort	179ms
Quick Sort	11066ms
Selection Sort	14210ms

Vector length: 100,000
Order of numbers: Random
Range of numbers: 0 - 1,000,000

Algorithm	Time
Quick Sort	21ms
Shell Sort	24ms
BST Sort	40ms
Heap Sort	56ms
Merge Sort	183ms
Insertion Sort	7667ms
Selection Sort	14466ms

Vector length: 100,000
Order of numbers: Descending
Range of numbers: 0 - 1,000,000

Algorithm	Time
Shell Sort	9ms
Heap Sort	53ms
Merge Sort	175ms
Quick Sort	429ms
BST Sort	8452ms
Selection Sort	14346ms
Insertion Sort	15205ms

Vector length: 1,000,000 LARGE
Order of numbers: Random
Range of numbers: 0 - 1,000,000

Algorithm	Time
Shell Sort	331ms
Heap Sort	671ms
Quick Sort	1 Second
Merge Sort	2 Seconds
BST Sort	16 seconds
Selection Sort	24 minutes
Insertion Sort	28 minutes

Vector length: 10,000,000 EXTREMELY LARGE
Order of numbers: Random
Range of numbers: 0 - 1,000,000

Algorithm	Time
Shell Sort	4 seconds
Heap Sort	9 seconds
Merge Sort	22 seconds
Quick Sort	111 seconds
BST Sort	8 minutes
Selection Sort	More than an hour
Insertion Sort	More than an hour

All tests conducted on Apple M1 and all algorithms sort the numbers ascending using 1 thread.
The source is hosted on GitHub at https://github.com/agile8118/sorting-algorithms-timings.