

**Intel i7 4 çekirdek 16gb Ram**

**Random Data: 1000**

Merge Sort - 1000 - 1 ms
Quick Sort - 1000 - 0 ms
Heap Sort - 1000 - 0 ms
Selection Sort - 1000 - 2 ms
Bubble Sort - 1000 - 3 ms
Insertion Sort - 1000 - 2 ms
Shell Sort - 1000 - 0 ms

**Random Data: 10k**

Merge Sort - 10000 - 1 ms
Quick Sort - 10000 - 1 ms
Heap Sort - 10000 - 2 ms
Selection Sort - 10000 - 41 ms
Bubble Sort - 10000 - 78 ms
Insertion Sort - 10000 - 13 ms
Shell Sort - 10000 - 2 ms

**Random Data: 50k**

Merge Sort - 50000 - 6 ms
Quick Sort - 50000 - 3 ms
Heap Sort - 50000 - 7 ms
Selection Sort - 50000 - 509 ms
Bubble Sort - 50000 - 2498 ms
Insertion Sort - 50000 - 127 ms
Shell Sort - 50000 - 5 ms

**Random Data: 100k**

Merge Sort - 100000 - 13 ms
Quick Sort - 100000 - 6 ms
Heap Sort - 100000 - 8 ms
Selection Sort - 100000 - 1617 ms
Bubble Sort - 100000 - 10456 ms -> 10 saniye
Insertion Sort - 100000 - 558 ms
Shell Sort - 100000 - 11 ms

**Random Data: 500k**

Merge Sort - 500000 - 55 ms
Quick Sort - 500000 - 29 ms
Heap Sort - 500000 - 49 ms

Selection Sort - 500000 - 41432 ms
Bubble Sort - 500000 - 264599 ms -> 4.40 dk
Insertion Sort - 500000 - 13229 ms
Shell Sort - 500000 - 60 ms

#### Random Data: 1m

Merge Sort - 1000000 - 117 ms
Quick Sort - 1000000 - 63 ms
Heap Sort - 1000000 - 110 ms
Selection Sort - 1000000 - 165127 ms -> 2.75dk
Bubble Sort - 1000000 - 1066907 ms -> 17.78dk
Insertion Sort - 1000000 - 56823 ms
Shell Sort - 1000000 - 137 ms

#### Sorted(Sirali) Data: 1000

Merge Sort - 1000 - 0 ms
Quick Sort - 1000 - 1 ms
Heap Sort - 1000 - 0 ms
Selection Sort - 1000 - 0 ms
Bubble Sort - 1000 - 0 ms
Insertion Sort - 1000 - 0 ms
Shell Sort - 1000 - 0 ms

#### Sorted(Sirali) Data: 10k

Merge Sort - 10000 - 1 ms
Quick Sort - 10000 - 40 ms
Heap Sort - 10000 - 1 ms
Selection Sort - 10000 - 17 ms
Bubble Sort - 10000 - 12 ms
Insertion Sort - 10000 - 0 ms
Shell Sort - 10000 - 0 ms

#### Sorted(Sirali) Data: 50k

Merge Sort - 50000 - 3 ms
Quick Sort - 50000 - 1039 ms
Heap Sort - 50000 - 3 ms
Selection Sort - 50000 - 428 ms
Bubble Sort - 50000 - 286 ms
Insertion Sort - 50000 - 0 ms
Shell Sort - 50000 - 0 ms

#### Sorted(Sirali) Data: 100k

Merge Sort - 100000 - 6 ms
Quick Sort - 100000 - 4162 ms
Heap Sort - 100000 - 6 ms
Selection Sort - 100000 - 1688 ms
Bubble Sort - 100000 - 1141 ms
Insertion Sort - 100000 - 0 ms
Shell Sort - 100000 - 1 ms

#### Sorted(Sirali) Data: 500k

Merge Sort - 500000 - 21 ms
Quick Sort - 500000 - 105530 ms -> 1.75dk
Heap Sort - 500000 - 30 ms
Selection Sort - 500000 - 42774 ms
Bubble Sort - 500000 - 29906 ms
Insertion Sort - 500000 - 0 ms
Shell Sort - 500000 - 6 ms

#### Sorted(Sirali) Data: 1m

Merge Sort - 1000000 - 41 ms
Quick Sort - 1000000 - 433078 ms -> 7.2dk
Heap Sort - 1000000 - 64 ms
Selection Sort - 1000000 - 171865 ms -> 2.86dk
Bubble Sort - 1000000 - 118933 ms -> 1.98dk
Insertion Sort - 1000000 - 1 ms
Shell Sort - 1000000 - 15 ms

#### Reverse Sorted(Ters Sirali) Data: 1000

Merge Sort - 1000 - 0 ms
Quick Sort - 1000 - 0 ms
Heap Sort - 1000 - 0 ms
Selection Sort - 1000 - 1 ms
Bubble Sort - 1000 - 0 ms
Insertion Sort - 1000 - 0 ms
Shell Sort - 1000 - 0 ms

#### Reverse Sorted(Ters Sirali) Data: 10k

Merge Sort - 10000 - 0 ms
Quick Sort - 10000 - 32 ms
Heap Sort - 10000 - 0 ms
Selection Sort - 10000 - 18 ms
Bubble Sort - 10000 - 57 ms
Insertion Sort - 10000 - 10 ms
Shell Sort - 10000 - 0 ms

**Reverse Sorted(Ters Siralı) Data: 50k**

Merge Sort - 50000 - 2 ms
Quick Sort - 50000 - 777 ms
Heap Sort - 50000 - 3 ms
Selection Sort - 50000 - 446 ms
Bubble Sort - 50000 - 1372 ms
Insertion Sort - 50000 - 269 ms
Shell Sort - 50000 - 1 ms

**Reverse Sorted(Ters Siralı) Data: 100k**

Merge Sort - 100000 - 4 ms
Quick Sort - 100000 - 3163 ms
Heap Sort - 100000 - 6 ms
Selection Sort - 100000 - 1777 ms
Bubble Sort - 100000 - 5479 ms
Insertion Sort - 100000 - 1040 ms
Shell Sort - 100000 - 1 ms

**Reverse Sorted(Ters Siralı) Data: 500k**

Merge Sort - 500000 - 19 ms
Quick Sort - 500000 - 80754 ms -> 1.34dk
Heap Sort - 500000 - 30 ms
Selection Sort - 500000 - 45731 ms
Bubble Sort - 500000 - 140901 ms -> 2.34dk
Insertion Sort - 500000 - 26270 ms
Shell Sort - 500000 - 9 ms

**Reverse Sorted(Ters Siralı) Data: 1m**

Merge Sort - 1000000 - 41 ms
Quick Sort - 1000000 - 324931 ms -> 5.41dk
Heap Sort - 1000000 - 61 ms
Selection Sort - 1000000 - 187326 ms -> 3.1dk
Bubble Sort - 1000000 - 566717 ms -> 9.4dk
Insertion Sort - 1000000 - 108834 ms -> 1.81dk
Shell Sort - 1000000 - 20 ms

Process finished with exit code 0