Ascending Insertion Sort

Time (in NS)

# of Keys

X (Ascending Sort Time)

Descending Insertion Sort

Time (in NS)

# of Keys

X (Descending Sort Time)

Random Keys Insertion Sort

Time (in NS) vs # of Keys

X (Random Sort Time)

Ascending Merge Sort

Time (in NS) vs # of Keys

X (Ascending Sort Time)

Descending Merge Sort

Random Keys Merge Sort

The merge sort on 10 keys took: 17300 ns.
The ascending merge sort on 10 keys took: 30400 ns.
The descending merge sort on 10 keys took: 6100 ns.
The insertion sort on 10 keys took: 8300 ns.
The ascending insertion sort on 10 keys took: 2100 ns.
The descending insertion sort on 10 keys took: 12700 ns.

The merge sort on 100 keys took: 108000 ns.
The ascending merge sort on 100 keys took: 142800 ns.
The descending merge sort on 100 keys took: 89800 ns.

The insertion sort on 100 keys took: 101300 ns.
The ascending insertion sort on 100 keys took: 8000 ns.
The descending insertion sort on 100 keys took: 214900
ns.

The merge sort on 1000 keys took: 1187200 ns.
The ascending merge sort on 1000 keys took: 332500
ns.
The descending merge sort on 1000 keys took: 249700
ns.

The insertion sort on 1000 keys took: 3753700 ns.
The ascending insertion sort on 1000 keys took: 17200 ns.
The descending insertion sort on 1000 keys took: 8544600
ns.

The insertion sort on 10000 keys took: 41288700 ns.
The ascending insertion sort on 10000 keys took: 182100 ns.
The descending insertion sort on 10000 keys took: 95091300
ns.

The merge sort on 100000 keys took: 30670600 ns.
The ascending merge sort on 100000 keys took: 14723100 ns.
The descending merge sort on 100000 keys took: 10036800
ns.

The insertion sort on 100000 keys took: 6266065000 ns.
The ascending insertion sort on 100000 keys took: 1906700 ns.
The descending insertion sort on 100000 keys took: 9391826600
ns.

The merge sort on 1000000 keys took: 309763400 ns.
The ascending merge sort on 1000000 keys took: 262191500 ns.
The descending merge sort on 1000000 keys took: 275359600 ns.

The insertion sort on 1000000 keys took: 2447627430800 ns.
The ascending insertion sort on 1000000 keys took: 13504300 ns.
The descending insertion sort on 1000000 keys took: 2896176903500
ns.