

LAB3: MERGE SORT

Input:

```
if __name__ == '__main__':  
    array = [68, 89, 34, 87, 64, 98, 102]  
  
    mergesort(array)  
  
    print("Sorted array is: ")  
    printarr(array)
```

Output:

```
Sorted array is:  
34 64 68 87 89 98 102
```

Time complexity graph:

```
Mergesort Sorted 1000 Elements in 0.002000570297241211 s  
Mergesort Sorted 2000 Elements in 0.006000041961669922 s  
Mergesort Sorted 3000 Elements in 0.013997554779052734 s  
Mergesort Sorted 4000 Elements in 0.015003442764282227 s  
Mergesort Sorted 5000 Elements in 0.01700115203857422 s  
Mergesort Sorted 6000 Elements in 0.02199411392211914 s  
Mergesort Sorted 7000 Elements in 0.024001359939575195 s  
Mergesort Sorted 8000 Elements in 0.028998374938964844 s  
Mergesort Sorted 9000 Elements in 0.032000064849853516 s  
Merge Sort Sorted Elements in 0.15625 s
```

