For one value of N:

```
C:\Users\Prashanth\Documents\ADA LAB>obj
enter value of N - number of elements in an array
10
enter values into the array
5 50 2 20 3 30 1 10 4 40
After sorting :
1  2  3  4  5  10  20  30  40  50
C:\Users\Prashanth\Documents\ADA LAB>
```

Time taken for different N values:

```
C:\Users\Prashanth\Documents\ADA LAB>obj
time taken by 500 elements = 0.001000 secs
time taken by 1500 elements = 0.007000 secs
time taken by 2500 elements = 0.016000 secs
time taken by 3500 elements = 0.016000 secs
time taken by 4500 elements = 0.026000 secs
time taken by 5500 elements = 0.037000 secs
time taken by 6500 elements = 0.057000 secs
time taken by 7500 elements = 0.072000 secs
time taken by 8500 elements = 0.101000 secs
time taken by 9500 elements = 0.125000 secs
time taken by 10500 elements = 0.141000 secs
time taken by 11500 elements = 0.167000 secs
time taken by 12500 elements = 0.209000 secs
time taken by 13500 elements = 0.229000 secs
time taken by 14500 elements = 0.260000 secs

C:\Users\Prashanth\Documents\ADA LAB>
```

Time vs N graph: