

```
Blue: Terminal Window - HW6
Options
{original 10 int array: [30, 66, 91, 61, 7, 1, 48, 2, 66, 81]
Selection Sorted small array: [1, 2, 7, 30, 48, 61, 66, 66, 81, 91]
Selection Sort iterations: 45
Merge Sorted small array: [1, 2, 7, 30, 48, 61, 66, 66, 81, 91]
Merge Sort iterations: 28
Original large array created.
Selection Sort iterations for large array: 49995000
Merge Sort iterations for large array: 127624
For a array size of 10, selection sort may be the better option. For larger array sizes such as 10000, merge sort is recommended because of its ability to group multiple integers and less iterations needed.
```

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Recommendation:

For an array size of 10 or smaller data sets, selection sort may be the better option for simple sorting and minimal memory usage. For larger array sizes such as 10000, merge sort is recommended because of its ability to group multiple integers and less iterations needed making it more efficient for larger arrays.