**Lab 6 – Starting searching and reviewing merge sort**

**Part I Starting Searching**

1. Write an algorithm, in pseudo code, which searches for the max. and min. of N numbers in an unordered array A. //Bring this to class on Friday
2. Implement the algorithm in 1. in C.
3. Write an algorithm, in pseudo code, which searches for a particular number in an ordered array A. //Bring this to class on Friday
4. Implement the algorithm in 3. in C.

**Part II Practicing the Merge Sort**

1. Fill up the call stack when the following numbers are sorted using the *Merge Sort* algorithm. (It has been started overleaf)

5 2 4 3

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| --- | --- | --- | --- |
| **Line Number** | **Function Calls** | **Left/right** | **n** |
|  | MergeSort(A, 0, 3) |  | 4 |
| 5 | MergeSort(A, 0, 1) | Left | 2 |
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