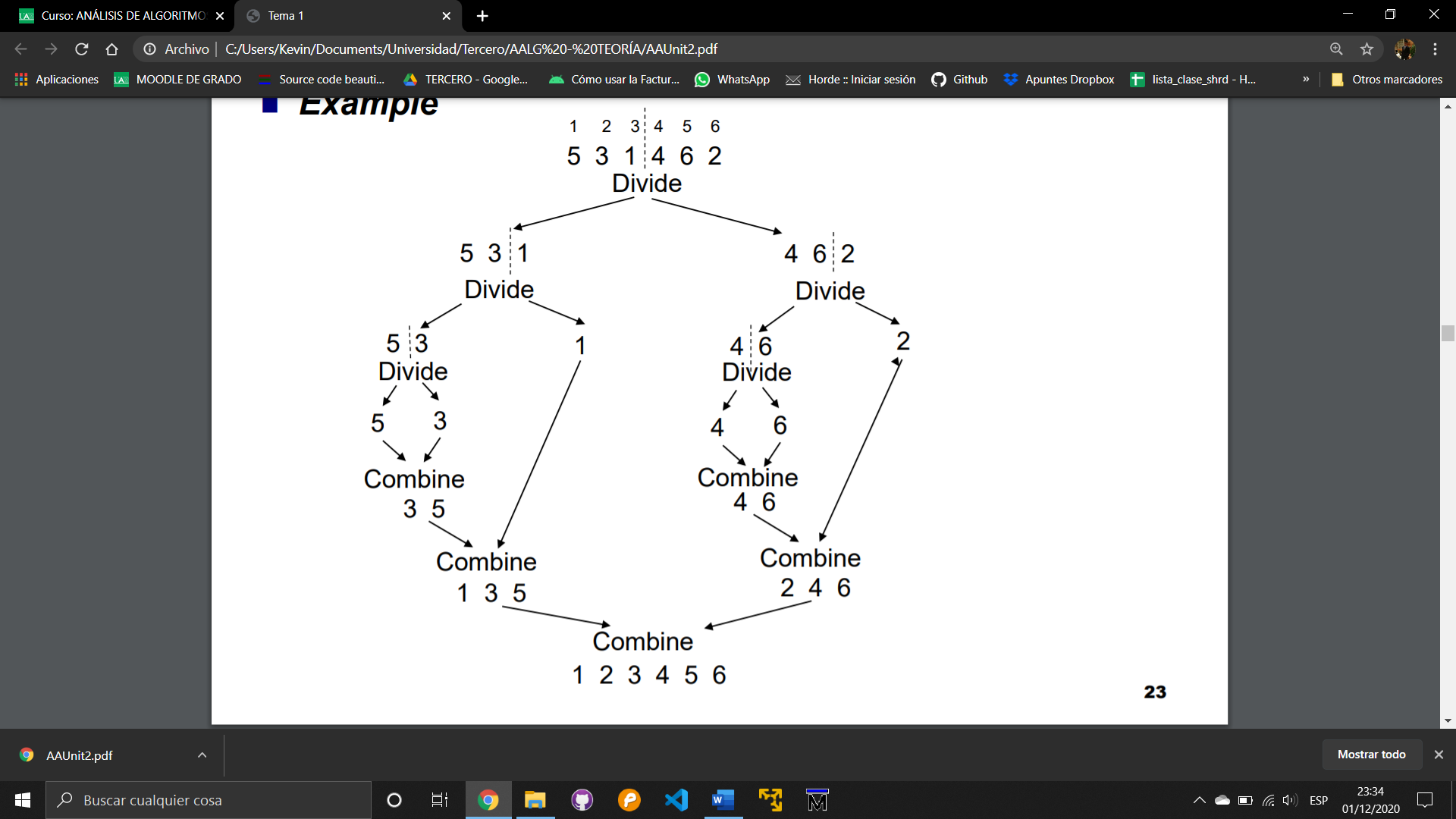
**Recursive Sorting algorithms**

1. Divide and conquer methods

* **MergeSort**: Mergesort is a divide and conquer algorithm which is divided in two parts, **divide** and **combine**.

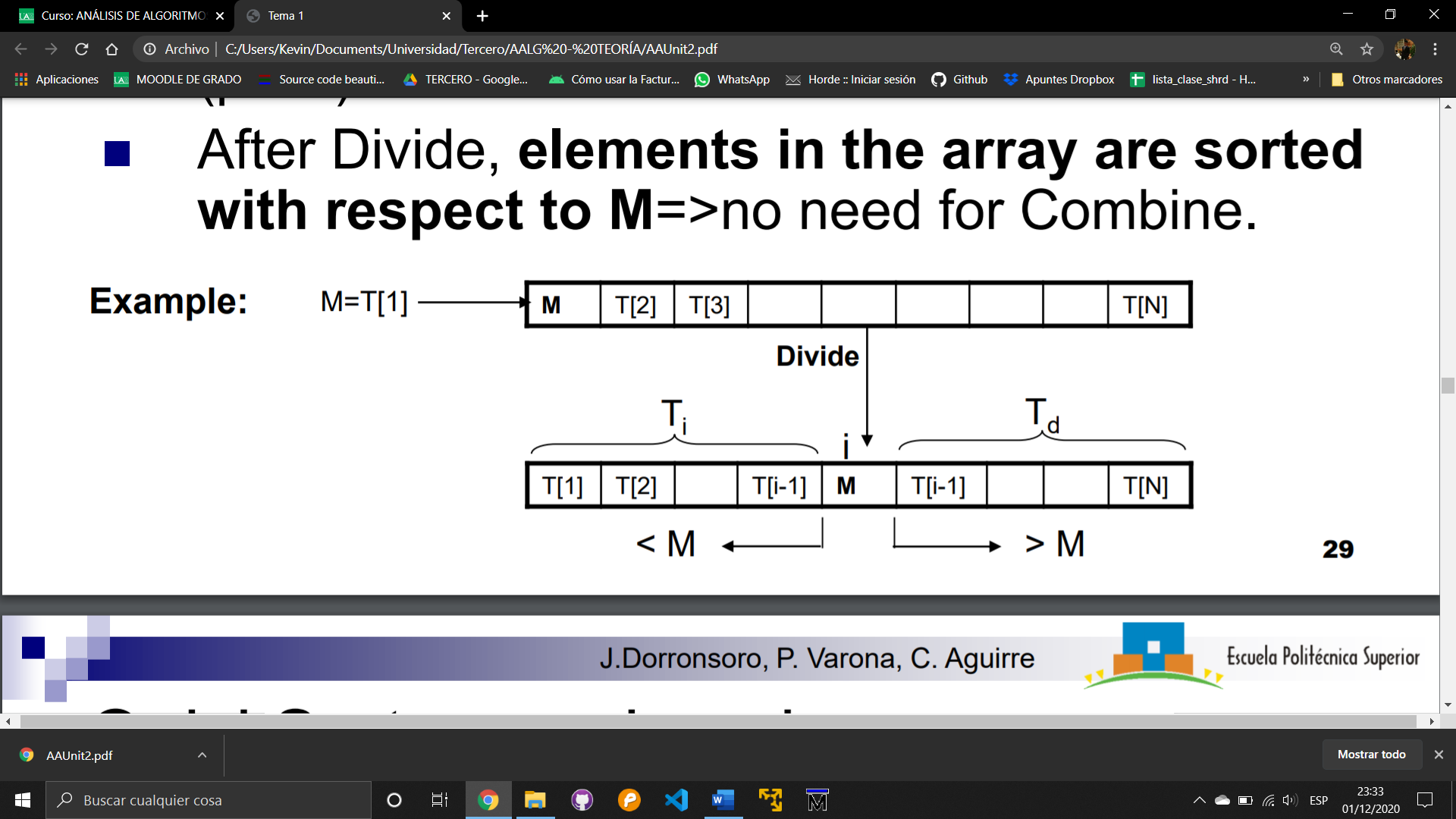
It uses recursive calls to itself, therefore the complexity is calculated with recursive equations.

The runtime of the algorithm is good, but it uses dynamic memory and being recursive makes it less efficient regarding the stack.



* **Quicksort**: Quicksort is also a divide and conquer algorithm which is divided in two parts, **divide** and **combine**.

*Divide* takes an element of the array and then the array is sorted based in that element.



The **pivot** (M) can be selected in a lot of ways, not just the first element.