

Thanakorn Hoonsil 6281556
Thana 6380271

As we are functional and parallel programming. We were learning about how can implement parallel function which will make the program run faster. Here is some sorting functions that implement parallel function(rayon). We compare these functions that have vector and linked-list as the argument to find the fastest. Moreover, we create many functions, for example, sorting by odd number or even number comes first and the function of matrix multiplication.

In the early process of making this project we try to make the linked_list structure with parallel by ourselves, but It was too difficult and out of scope of our knowledge. Therefore we gave up and import the linked-list instead in the parallel part. However, we would like to submit what we have done so far.

Lastly we compared the timing of all function

Here the result we get,

normal quick sort:Vec	= 0.0039011s
parallel quicksort:Vec	= 0.0020253s
normal merge sort:Vec	= 0.0041856s
parallel merge sort:Vec	= 0.0017733s
normal quick sort: Linked-List	= 0.0053994s
parallel quicksort: Linked-List	= 0.0028556s
normal merge sort: Linked-List	= 0.0046246s
parallel merge sort: Linked-List	= 0.0024854s

So, this means that vec is faster than linked-list in every function we implemented.

For our working part, we help each other on every single part.