Lab9 documentation

Normal Alg:

-complexity: O(n^2)

-implementation: 1 for loop and 1 while loop

-used mpi for distributing the work

Ex:

Test1:

-length: 2

-time: 00:00:00.0811116 sec

Test2:

-length:10

-time: 00:00:00.0809187 sec

Test3:

-length:100

-time: 00:00:05.4961404 sec

Test4:

-length: 50

-time: 00:00:02.3437185 sec

Karatsuba alg:

-complexity: O(n^lg3)

-implementation: divide&conquer

- divide: divide the polynomials in 2

-conquer: compute and make the result

-used mpi for distributing the work

Ex:

Test1:

-length: 2

-time: 00:00:00.0215742 sec

Test2:

-length:10

-time: 00:00:00.0718080 sec

Test3:

-length:100

-time: 00:00:01.9083270 sec

Test4:

-length: 50

-time: 00:00:00.3875176 sec