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CSS 342

Mergesort Comparison

initial:

items[0] = 10

items[1] = 22

items[2] = 26

items[3] = 11

items[4] = 7

items[5] = 8

items[6] = 1

items[7] = 23

items[8] = 5

items[9] = 28

items[10] = 0

items[11] = 25

items[12] = 19

items[13] = 27

items[14] = 3

items[15] = 29

items[16] = 13

items[17] = 30

items[18] = 2

items[19] = 24

items[20] = 15

items[21] = 6

items[22] = 9

items[23] = 16

items[24] = 12

items[25] = 14

items[26] = 17

items[27] = 21

items[28] = 18

items[29] = 4

items[30] = 20

elapsed time: 0

sorted:

items[0] = 0

items[1] = 1

items[2] = 2

items[3] = 3

items[4] = 4

items[5] = 5

items[6] = 6

items[7] = 7

items[8] = 8

items[9] = 9

items[10] = 10

items[11] = 11

items[12] = 12

items[13] = 13

items[14] = 14

items[15] = 15

items[16] = 16

items[17] = 17

items[18] = 18

items[19] = 19

items[20] = 20

items[21] = 21

items[22] = 22

items[23] = 23

items[24] = 24

items[25] = 25

items[26] = 26

items[27] = 27

items[28] = 28

items[29] = 29

items[30] = 30

#items Time(in seconds)

*Improved Mergesort*

10 0.050

100 0.855

1000 0.915

10000 2.329

*Normal Mergesort*

10 0.062

100 0.031

1000 0.062

10000 1.372

*Normal Quicksort*

10 0.047

100 0.016

1000 0.043

10000 1.252

