

System configuration

Windows 10

CPU/Clock Speed: Intel(R) Core(TM) i7-4700MQ CPU @ 2.40GHz (8 CPUs), ~2.4GHz

RAM: 16384MB

Construction times

Input 1: 0ms

Input 2: 0ms

Input 3: 3ms

Input 4: 71ms

Input 5: 745ms

Justification

Because the size of the inputs increases by an order of magnitude with each iteration, if our algorithm is linear with input, its time to run should also increase by roughly an order of magnitude each time as well.

Implementation constant

Input 1: 13 bytes of input, 712kb memory used.

Input 3: 12,148 bytes of input, 2.0mb memory used

Input 4: 159,996 bytes of input, 17.7mb memory used

Input 5: 1,114,228 bytes of input, 128mb memory used

Using a simple linear regression on this dataset, it appears our implementation constant is 114 with a pretty good fit.

BWT index

BWT indexes for all strings included in BWT folder.

Exact matching repeat

1: ana @ 2, 4

2: issi @ 5, 2

3: ACAGAAT @ 7252, 9237

4: CAATTTAGGAGGAATCAATGCAATTTAGGAGGAATCAATG @ 88151,88131

5: too long @ 451419,460556