

Pruebas Unitarias

RedBlack Tree

RBTtest X

Tests passed: 100.00 %

The test passed. (0.063 s)

- ✓ RBTtest passed
- ✓ IngresarYBuscar passed (0.002 s)

Splay Tree

SplayTreeTest X

Tests passed: 100.00 %

The test passed. (0.064 s)

- ✓ SplayTreeTest passed
- ✓ IngresarYBuscar passed (0.003 s)

Medición de tiempos

Splay Tree

Corrida	Crear Diccionario (ms)	Traducir (ms)
1	89.8	4.15
2	89.8	6.71
3	50.8	6.2
Promedio	76.8	5.69

Name	Total Time	Total Time (CPU)	Invocations
main	4,996 ms (100%)	163 ms (100%)	1
ht9.HT9.main (String[])	4,996 ms (100%)	163 ms (100%)	1
java.util.Scanner.nextLine ()	4,707 ms (94.2%)	15.6 ms (9.5%)	1
Self time	158 ms (3.2%)	60.7 ms (37.2%)	1
ht9.SplayTree.insert (ht9.Association)	89.8 ms (1.8%)	61.1 ms (37.4%)	5,907
java.util.Scanner.<init> (java.io.InputStream)	17.3 ms (0.3%)	15.6 ms (9.6%)	1
ht9.SplayTree.search (String)	9.94 ms (0.2%)	0.0 ms (0%)	3
java.util.Scanner.<clinit> ()	5.46 ms (0.1%)	0.0 ms (0%)	1
ht9.SplayTree.translate (String)	4.15 ms (0.1%)	15.6 ms (9.5%)	3
ht9.Association.<init> (Object, Object)	4.0 ms (0.1%)	0.0 ms (0%)	5,907
ht9.SplayTree.<init> ()	0.016 ms (0%)	0.0 ms (0%)	1
ht9.RedBlackTree.<init> ()	0.009 ms (0%)	0.0 ms (0%)	1

Red Black Tree

Corrida	Crear Diccionario (ms)	Traducir (ms)
1	201	0.105
2	165	0.12
3	182	0.073
Promedio	182.67	0.10

main	1,559 ms (100%)	230 ms (100%)	1
ht9.HT9.main (String[])	1,559 ms (100%)	230 ms (100%)	1
java.util.Scanner.nextLine ()	1,280 ms (82.1%)	0.0 ms (0%)	1
ht9.RedBlackTree.put (Comparable, Comparable)	182 ms (11.7%)	121 ms (52.9%)	5,907
Self time	73.6 ms (4.7%)	108 ms (47.1%)	1
java.util.Scanner.<init> (java.io.InputStream)	17.3 ms (1.1%)	0.0 ms (0%)	1
java.util.Scanner.<clinit> ()	5.64 ms (0.4%)	0.0 ms (0%)	1
ht9.RedBlackTree.get (Comparable)	0.073 ms (0%)	0.0 ms (0%)	6
ht9.SplayTree.<init> ()	0.015 ms (0%)	0.0 ms (0%)	1
ht9.RedBlackTree.<init> ()	0.014 ms (0%)	0.0 ms (0%)	1

Conclusión

Como podemos observar el Splay Tree es más rápido para armar los arboles teniendo un tiempo promedio de 76.8ms, mientras que el RBT se tarda 182.67ms. Por otro lado, se puede observar que el RBT es mucho más rápido para traducir, teniendo un promedio de 0.10ms mientras que el Splay Tree 5.69ms