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HDT #6: Maps

Métodos

Inciso	Método
1	Put
2	showCard
3	printDeck
4	printOrderedDeck
5	printMap
6	printOrderedMap

Tiempo para mostrar todas las cartas sin ordenar: (printMap)

Implementación	Tiempo (ms)
HashMap	375 (más rápida)
TreeMap	420
LinkedHashMap	384

Cálculo de tiempo HashMap:

$O(1)$ dado que al utilizar una fórmula de Hash, únicamente se requiere ejecutarla para llegar a la posición buscada de manera automática. Además, mostró ser la implementación más rápida con un tiempo de 375ms para un total de 8861 registros de cartas. Al ser éste un resultado de tiempo sumamente pequeño en comparación con la cantidad de registros, se deduce un tiempo de $O(1)$ para la operación *HashMap.get* al obtener todas las cartas dentro del método printDeck.

HashMap

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JavaScript XHR

Threads

Monitors & locks

Databases

JEE & Probes

MBeans

Thread selection: All thread groups

Aggregation level: Methods

Thread status: Runnable

View mode: Tree

100.0% - 59,664 ms Main.main

84.1% - 50,183 ms java.util.Scanner.nextInt

8.7% - 5,180 ms java.util.Scanner.nextLine

5.5% - 3,259 ms Funciones.PrepareCards

1.1% - 645 ms Deck.printOrderedMap

0.6% - 375 ms Deck.printMap

0.0% - 5,272 μs Deck.printDeck

0.0% - 5,021 μs java.io.PrintStream.println

0.0% - 4,919 μs Deck.printOrderedDeck

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TreeMap

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MBeans

Thread selection:All thread groupsAggregation level:Methods

Thread status:RunnableView mode:Tree

100.0% - 99,430 ms Main.main

84.7% - 84,191 ms java.util.Scanner.nextInt

10.9% - 10,809 ms java.util.Scanner.nextLine

3.2% - 3,219 ms Funciones.PrepareCards

0.8% - 770 ms Deck.printOrderedMap

0.4% - 420 ms Deck.printMap

0.0% - 5,022 μs Deck.<init>

0.0% - 4,960 μs Deck.put

0.0% - 4,750 μs Deck.printOrderedDeck

0.0% - 4,680 μs Deck.printDeck

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LinkedHashMap

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Thread selection: All thread groups

Aggregation level: Methods

Thread status: Runnable

View mode: Tree

100.0% - 84,200 ms Main.main

79.9% - 67,238 ms java.util.Scanner.nextInt

13.3% - 11,235 ms java.util.Scanner.nextLine

5.4% - 4,584 ms Funciones.PrepareCards

0.9% - 720 ms Deck.printOrderedMap

0.5% - 384 ms Deck.printMap

0.0% - 14,669 µs Deck.put

0.0% - 10,399 µs java.io.PrintStream.println

0.0% - 5,483 µs Deck.printDeck

0.0% - 5,286 µs Deck.printOrderedDeck

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