

TESTING DOCUMENTATION

HASH TABLE

Scenarios Set Up:

Name	Class	Scenary
HashTableTesting	HashTable	null
setUp1	HashTable	HashTable with 3 elements
setUp2	HashTable	HashTable with 4 elements (two with the same key)

Test Cases Design:

Test Objective:				
Class	Method	Scenary	Entry Values	Result
HashTable	hashFunction()	setUp1	5	Integer.class
HashTable	add()	HashTableTesting	1,2	False
HashTable	add()	setUp1	10,10 0,0	5
HashTable	getValue()	setUp1	1	1
HashTable	hashFunction()	setUp1	4	null
HashTable	getValue()	setUp1	1,2 1	1
HashTable	getFirst()	setUp1	1	1
HashTable	getFirst()	setUp1	5	null

HashTable	getFirst()	setUp1	1	1
HashTable	findValue()	setUp2	40	2
HashTable	findValue()	setUp2	500	null
HashTable	find()	setUp2	240	1
HashTable	find()	setUp2	500	null
HashTable	delete()	setUp1	1,1	null
HashTable	delete()	setUp1	0,0	3
HashTable	isEmpty()	HashTableTesting	N/A	true
HashTable	isEmpty	setUp1	N/A	false

QUEUE

Scenarios Set Up:

Name	Class	Scenary
QueueTesting	Queue	null
setUp1	Queue	Queue with 1 element
setUp2	Queue	Queue with 4 elements

Test Cases Design:

Test Objective:				
Class	Method	Scenary	Entry Values	Result
Queue	add()	QueueTesting	1	false
Queue	getTop()	setUp2	N/A	1
Queue	add()	setUp1	2	2
Queue	GetSize()	setUp2	N/A	4
Queue	getSize()	setUp2	N/A	3
Queue	Poll()	setUp2	N/A	1
Queue	Poll()	QueueTesting	N/A	null
Queue	Peek()	setUp1	N/A	1
Queue	isEmpty	QueueTesting	N/A	true

Queue	Poll() getTop()	setUp2	N/A	2
Queue	Poll() Peek()	setUp2	N/A	2
Queue	showQueue()	QueueTesting	N/A	"Queue is empty"
Queue	showQueue()	setUp1	N/A	"1"

STACK

Scenarios Set Up:

Name	Class	Scenary
StackTesting	Stack	null
setUp1	Stack	Stack with 1 element
setUp2	Stack	Stack with 4 elements

Test Cases Design:

Test Objective:				
Class	Method	Scenary	Entry Values	Result
Stack	Push()	StackTesting	1	False
Stack	getTop()	SetUp2	N/A	4
Stack	Pop()	setUp2	N/A	4
Stack	Pop()	setUp1	N/A	1
Stack	Pop()	StackTesting	N/A	Null
Stack	Peek()	setUp2	N/A	4
Stack	Peek()	StackTesting	N/A	Null
Stack	Peek()	setUp1	N/A	1
Stack	isEmpty()	StackTesting	N/A	true

Stack	IsEmpty()	setUp1	N/A	False
Stack	getSize()	setUp1	N/A	1
Stack	GetSize()	setUp2	N/A	4
Stack	getSize()	StackTesting	N/A	0

MIN HEAP

Scenarios Set Up:

Name	Class	Scenary
MinHeapTest	MinHeap	null
setUp	MinHeap	MinHeap with 1 element
setUp1	MinHeap	MinHeap with 5 elements

Test Cases Design:

Test Objective:				
Class	Method	Scenary	Entry Values	Result
MinHeap	IsEmpty()	MinHeapTest	N/A	True
MinHeap	IsEmpty()	setUp	N/A	False
MinHeap	Insert()	MinHeapTest	2	False
MinHeap	addElements()	MinHeapTest	1,2,3	False
MinHeap	peekMin ()	setUp	N/A	1
MinHeap	peekMin ()	setUp1	N/A	5
MinHeap	peekMin ()	MinHeapTest	N/A	null
MinHeap	extractMin ()	MinHeapTest	N/A	Null
MinHeap	extractMin()	setUp	N/A	1

MinHeap	extractMin ()	setUp1	N/A	5
MinHeap	getHeap()	MinHeapTest	N/A	0
MinHeap	getHeap()	MinHeapTest	N/A	5