Test design

Setup bookTest

Name	Class	Stage
Setup1	Book	key="4353" value=1 title="1 miles" chapter="Inside" review="Good" critique="5 stars" cost=40000 quantity=3 book=new Book(key,value, chapter,review,critique,title,cost,quantity)

Setup ClientTest

Name	Class	Stage
setupStage1	Client	id="1193033579" client = new Client (id)

Setup HashTableTest

Name	Class	Stage
setupStage1	Hash	s=2 key1="4353" value1=1 title1="1 miles" chapter1="Inside" review1="Good" critique1="5 stars" cost1=40000 quantity1=3 key2="5643" value2=3 title2="Levitating" chapter2="Oscar" review2="So so" critique2="3 stars" cost2=26000 quantity2=2 h1=new HashTable() b1=h1.getBooks()
setupStage2	Hash	s=4 key1="4353" value1=1

		title1="1 miles"
		chapter1="Inside"
		review1="Good"
		critique1="5 stars"
		cost1=40000
		quantity1=3
		key2="5645"
		value2=3
		title2="Levitating"
		chapter2="Oscar"
		review2="So so"
		critique2="3 stars"
		cost2=26000
		quantity2=2
		key3="3465"
		value3=2
		title3="Burning"
		chapter3="Sancho"
		review3="Good"
		critique3="4 stars"
		cost3=39000
		quantity3=2
		key4="4243"
		value4=1 title4="My
		journy"
		chapter4="Day 1"
		review4="Nice"
		critique4="4 stars"
		cost4=32400
		quantity4=2
		h1=new HashTable()
		b1=h1.getBooks()

Setup QueueTest

Name	Class	Stage
setupStage1	Queue	q=new Queue() c1=new Client("1193033579") c2=new Client("1123443666") c3=new Client("1586859403")
setupStage2	Queue	q=new Queue()

Setup StackTest

Name	Class	Stage
setupStage1	Stack	key1="4353" value1=1

		title1="1 miles" chapter1="Inside" review1="Good" critique1="5 stars" cost1=40000 quantity1=3 key2="5643" value2=3 title2="Levitating" chapter2="Oscar" review2="So so" critique2="3 stars" cost2=2600 quantity2=2 b1=new book(key1,value1,chapter1,review1,critique1,title1,cost1,quantity1) b2=new Book(key2,value2,chapter2,review2,critique2,title2,cost2,quantity2) stack=new Stack()

setupStage2	Stack	key1="4353" value1=1 title1="1 miles" chapter1="Inside" review1="Good" critique1="5 stars" cost1=40000 quantity1=3 key2="5645" value2=3 title2="Levitating" chapter2="Oscar" review2="So so" critique2="3 stars" cost2=26000 quantity2=2 key3="3465" value3=2 title3="Burning" chapter3="Sancho" review3="Good" critique3="4 stars" cost3=39000 quantity3=2 key4="4243" value4=1 title4="My journy" chapter4="Day 1" review4="Nice"
		critique4="4 stars" cost4=32400 quantity4=2 b1=new Book(key1,value1,chapter1,review1,critique1,title1,cost1,quantity1) b2=new Book(key2,value2,chapter2,review2,critique2,title2,cost2,quantity2) b3=new Book(key3,value3,chapter3,review3,critique3,title3,cost3,quantity3) b4=new Book(key4,value4,chapter4,review4,critique4,title4,cost4,quantity4) stack=new Stack()

Test Book

Obj: the objective of this test is to verify that a book was added successfully			
Class	Method	Stage	Result
Book	testBook	setupStage1	The book has been added

Test Client

Obj: the objective of this test is to verify that id client exists and are equals to testClient id			
Class	Method	Stage	Result
Client	testClient	setupStage1	The id client exist and are equals

Obj: the objective of this test is to verify that a client has been clone			
Class	Method	Stage	Result
Client	testClone	setupStage1	The client has been clone and the id of the clone are equals of the client

| Obj: the objective of this test is to verify that the method priceBooks calculate the price of books from one client			
Class	Method	Stage	Result
Book	testPriceBooks	setupStage1	The client price are equals of price books

Obj: the objective of this test is to verify that a list of ISBN are empty			
Class	Method	Stage	Result
Client	testlisOfISBN	setupStage1	The list are empty

Test Hash

Obj: the objective of this test is to verify that the hash table are empty			
Class	Method	Stage	Result
Hash	TestHashTale	setupStage1	The has table are empty

Obj: the objective of this test is to verify that create two books and add to hash table			
Class	Method	Stage	Result
Hash	testPut	setupStage1	Two books has been added

HashTable();
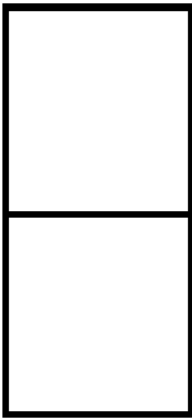
put(k1,v1,c1,r1,cr1,t1,m1,q1);

Book b1
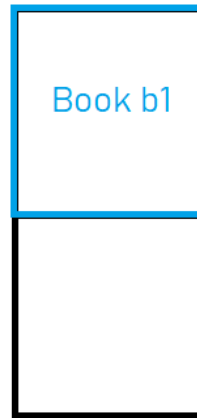
put(k2,v2,c2,r2,cr2,t2,m2,q2);

Book b1

Book b2
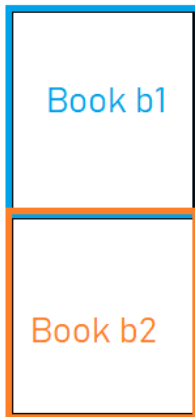
put(k3.v3,c3,r3,cr3,t3,m3,q3);

Book b1

Book b3

Book b2
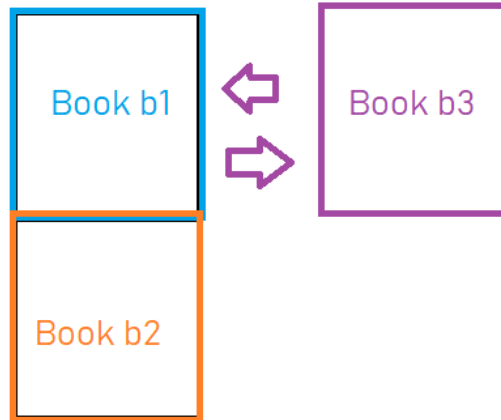
Obj: the objective of this test is to verify that two books are searching and found			
Class	Method	Stage	Result
Hash	testSearch	setupStage1	Two books are found

Obj: the objective of this test is to verify that the book has been delete			
Class	Method	Stage	Result
Hash	testRemove1	setupStage2	The book has been deleted

Obj: the objective of this test is to verify that the book has been delete			
Class	Method	Stage	Result
Hash	testRemove2	setupStage2	The book has been deleted

Obj: the objective of this test is to verify that the book has been delete			
Class	Method	Stage	Result
HashTable	TestRemove3	setupStage2	The book has been deleted

Obj: the objective of this test is to verify that the book has been delete			
Class	Method	Stage	Result
HashTable	TestRemove4	setupStage2	The book has been deleted

Book b1 ⇐ ⇒ Book b3

Book b2

remove(k3);

Book b1

Book b2
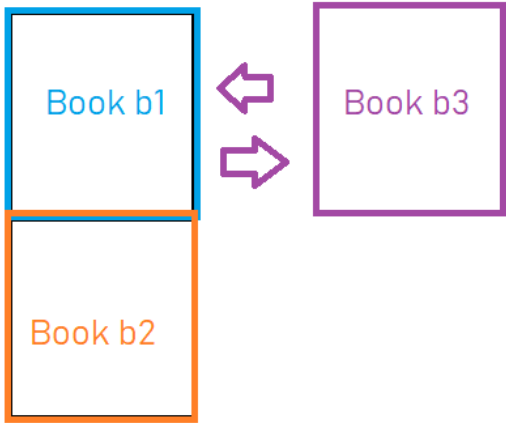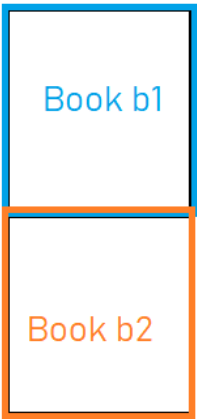
Obj: the objective of this test is to verify that are elements added are in the list			
Class	Method	Stage	Result
HashTable	testBookList	setupStage1	The list are books

Test Queue

Obj: the objective of this test is to verify the correct function of the queue			
Class	Method	Stage	Result
Queue	testQueue	setupStage1	The method give the front

Obj: the objective of this test is to verify the enquque method			
Class	Method	Stage	Result
Queue	testEnqueue	setupStage1	The method enqueue tree objects

Queue();

Front
enqueue(c1);

Client c1	

Front
enqueue(c2);

Client c1	Client c2	

Front
enqueue(c3);

Client c1	Client c3	Client c3
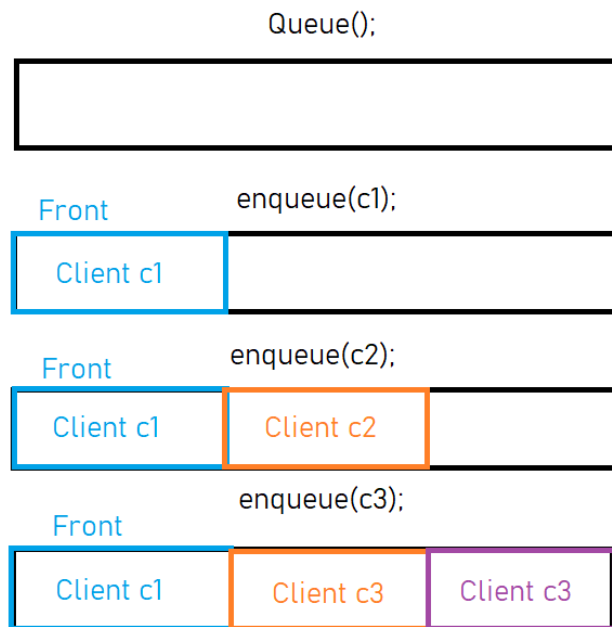
Obj: the objective of this test is to verify the dequeue method			
Class	Method	Stage	Result
Queue	testdequeue	setupStage1	The method enqueue three object and dequeue two object

Front

| Client c1 | Client c3 | Client c3 |

Front   dequeue();

| Client c2 | Client c3 | |

return | Client c1 |
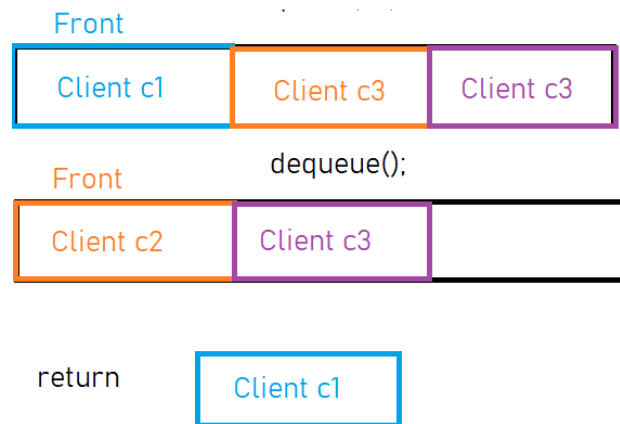
Obj: the objective of this test is to verify the front method			
Class	Method	Stage	Result
Queue	testFront	setupStage1	The method add three objects and gives the front of the queue

Obj: the objective of this test is to verify the queue are empty			
Class	Method	Stage	Result
Queue	testEmpty	setupStage2	The queue are empty

Test Stack

Obj: the objective of this test is to verify the correct function of the push method			
Class	Method	Stage	Result
Stack	testPush	setupStage1	The method add or push two object and search the top to verify

Stack();

Top   push(b1);

| Book b1 | |

push(b2);   Top

| Book b1 | Book b2 | |

push(b3)   Top

| Book b1 | Book b2 | Book b3 |
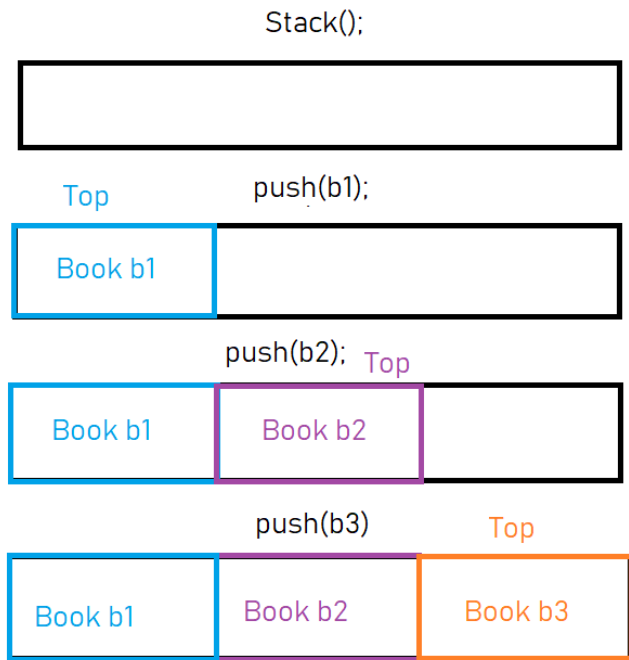
Obj: the objective of this test is to verify the correct function of the pop method			
Class	Method	Stage	Result
Stack	testPop	setupStage2	Add four object to stack and do a pop and verify the top
Obj: the objective of this test is to verify the correct function of the top method			
Class	Method	Stage	Result
Stack	testTop	setupStage1	Add two objects and verify the top in the stack

Top

| Book b1 | Book b2 | Book b3 |

pop()

Top

| Book b1 | Book b2 | |

return | Book b3 |

Top   pop()

| Book b1 | | |

return | Book b2 |
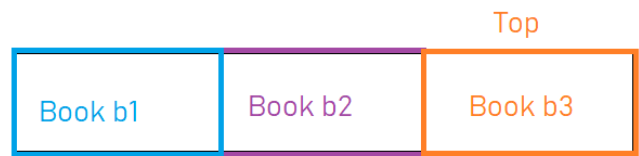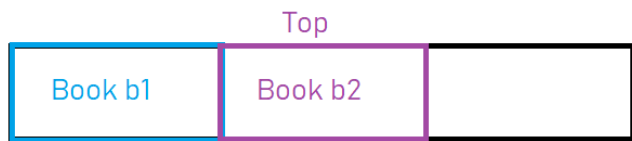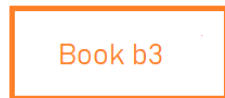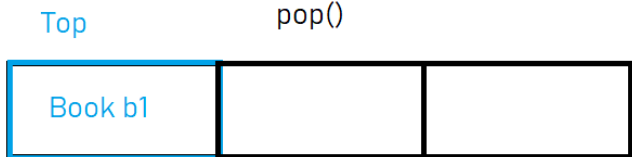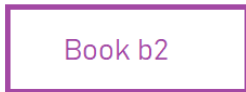
Obj: the objective of this test is to verify the transformation of the stack to array			
Class	Method	Stage	Result
Stack	testTopStackToArray	setupStage1	The stack has been convert to array