

CS355 Assignment#2 Test Cases

Victor Rogers, Martin Tuck, Tyler Yasaka

Default constructor

Create a table.

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Table is created.	✓	

Overloaded constructor

Create a table with size 0.

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Table ~ size 0.	✓	

Create a table with size 1.

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Table ~ size 2.	✓	

Create a table with size -10.

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Empty table.	✓	

Create a table with size 1000.

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Table ~ size 2000.	✓	

Copy Constructor

Copy an empty table.

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Empty table.	✓	

Copy a full table.

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Full table.	Driver freezes.	Yes!
11/7/2014	12:40 AM	Full table.	✓	No.

Copy a partly filled table.

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Partly filled table.	✓	

Assignment Operator

Copy an empty table.

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Empty table.	✓	

Copy a full table.

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Full table.	Driver freezes.	Yes!
11/6/2014	12:43 AM	Full table.	✓	No.

Copy a partly filled table.

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Partly filled table.	Error in `./driver': double free or corruption (fasttop): 0x00000000020 d9030	Yes!
11/7/2014	12:59 AM	Partly filled table.	✓	No.

Destructor

Create an empty table dynamically, then delete it.

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	No crashes.	✓	

Create a full table dynamically, then delete it.

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	No crashes.	✓	

Create a partly filled table dynamically, then delete it.

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	No crashes.	✓	

Create and delete tables one at a time in an infinite loop, and make sure program doesn't crash after several seconds.

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	No crashes.	✓	

Insert

Insert into empty table:0,-10,10

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Table with 1 item of value 10.	Some values not getting inserted. Some values cause driver to freeze.	Yes!
11/6/2014	11:48 PM	Table with 1 item of value 10.	✓	No

Insert into full table:0,-10,10

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Table remains same.	Some values not getting inserted. Some values cause driver to freeze.	Yes!
11/6/2014	11:48 PM	Table remains same.	✓	No

Insert into partly filled table:0,-10,10

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Table with value 10 added (not 0 or -10).	Some values not getting inserted. Some values cause driver to freeze.	Yes!
11/6/2014	11:48 PM	Table with value 10 added (not 0 or -10).	✓	No

Insert a number after removing it

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Number is in table.	Some values not getting inserted. Some values cause driver to freeze.	Yes!
		Number is in table.	✓	No

Remove

Remove number in table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Number is not in table.	✓	

Remove number not in table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Table remains same.	✓	

Remove from empty table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Table remains same.	✓	

Remove number in table from full table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Number is no longer in table.	✓	

Remove number 0 from table with at least 1 empty slot

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Table remains the same.	✓	

ClearTable

Clear empty table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Table remains the same.	✓	

Clear full table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Table is empty.	✓	

Clear partially filled table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Table is empty.	✓	

Clear large table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Table is empty.	✓	

Clear small table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Table is empty.	✓	

Search

Search empty table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Not found.	✓	

Search for number that exists in large populated table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Found.	✓	

Search for number not in large populated table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Not found.	✓	

Search for number 0

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Not found.	✓	

Search for number inserted in front of default hash point (if all slots were full and insert looped around to beginning of table to add item).

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Found	✓	

ShowFill

Print empty table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Print 0 items.	✓	

Print full table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Print all items.	✓	

Print partially filled table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Print all items.	✓	

Print large table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Print all items.	✓	

ShowContents

Print empty table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Print 0 items.	✓	

Print full table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Print all items.	✓	

Print partially filled table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Print all items.	✓	

Print large table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	Print all items.	✓	

TableFull

Check full table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	True.	✓	

Check empty table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	False.	✓	

Check partially filled table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	False.	✓	

Check large but not full table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	False	✓	

TableEmpty

Check full table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	False.	✓	

Check empty table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	True.	✓	

Check partially filled table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	False.	"Table is empty."	Yes!
12/7/2014	12:09 AM	False.	✓	No.

Check large non-empty table

Date	Time	Expected Result	Actual Result	Action Needed?
11/6/2014	10:02 PM	False.	"Table is empty."	Yes!
12/7/2014	12:09 AM	False.	✓	No.