

## Laboratory 5: Cover Sheet

Name Leah Kramer Date 09/06/2017

Section \_\_\_\_\_

Place a check mark in the *Assigned* column next to the exercises your instructor has assigned to you. Attach this cover sheet to the front of the packet of materials you submit following the laboratory.

Activities	Assigned: Check or list exercise numbers	Completed
Implementation Testing	✓	
Programming Exercise 1		
Programming Exercise 2	✓	
Programming Exercise 3	✓	
Analysis Exercise 1		
Analysis Exercise 2		
	Total	

## Laboratory 5: Implementation Testing

Name \_\_\_\_\_ Date \_\_\_\_\_

Section \_\_\_\_\_

Check with your instructor whether you are to complete this exercise prior to your lab period or during lab.

Test your implementation of the List ADT using the test program in the file *test5.cpp*. This program allows you to interactively test your implementation of the List ADT using the following commands.

Test Plan 5-1 (operations in the List ADT)			
Test case	Commands	Expected result	Checked
Insert at end	+a +b +c +d	a b c <b>d</b>	✓
Travel from beginning	< N N	a b <b>c</b> d	✓
Travel from end	> P P	a <b>b</b> c d	✓
Delete middle data item	-	a <b>c</b> d	✓
Insert in middle	+e +f +f	a c e f <b>f</b> d	✓
Remove last data item	> -	<b>a</b> c e f f	✓
Remove first data item	-	<b>c</b> e f f	
Display data item	@	Returns <b>c</b>	✓
Replace data item	=g	<b>g</b> e f f	✓
Clear the list	C	Empty list	

Note: The data item marked by the cursor is shown in **bold**.

Test Plan 5-2 (List ADT operations using integers)			
Test case	Commands	Expected result	Checked
Insert at end	+1 +2 +3 +4	1 2 3 <b>4</b>	✓
Travel from beginning	< N N	1 2 <b>3</b> 4	✓
Travel from end	> P P	1 <b>2</b> 3 4	✓
Delete middle data item	-	1 <b>3</b> 4	✓

*Note:* The data item marked by the cursor is shown in **bold**.



## Laboratory 5: Programming Exercise 3

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Name \_\_\_\_\_ Date \_\_\_\_\_

Section \_\_\_\_\_

Test Plan 5-5 (insertBefore operation)			
Test case	Commands	Expected result	Checked
Set up list	+a +b +c	a b <b>c</b>	
Insert in middle	#d	a b <b>d</b> c	
Cascade inserts	#e	a b <b>e</b> d c	
Insert after head	P #f	a <b>f</b> b e d c	
Insert as head	P #g	<b>g</b> a f b e c	

*Note:* The data item marked by the cursor is shown in **bold**.