

### General method used in testing:

1. Consider *category partitioning method*: Ensure positive, negative, 0, large inputs and random pairing between integration testing.
2. Reuse current test cases. Slightly modified the test cases to suit the implementation of the other team.

### Bug Report

Bug Report Number	Description	Testcase	Comments
1	Quoted command that is not enclosed properly does not return error message, it is stated in 7.1.2 Quoting part of the project description that quoted arguments should enclosed properly, else it should warn the user of the incorrect syntax	echo [quote]test	
2	Output redirection with no whitespace is not handled correctly, for example, running the right test case output "abc>aaa.txt" to aa.txt instead of "abc" to aaa.txt, which supposed to be the correct behavior	echo abc>aaa.txt	
3	It is stated in 7.1.2 Quoting part that backquoted arguments should not have any backquote inside, but this is not handled as no error message is returned and the shell behaves normally to this incorrect syntax.	echo ``	
4	Globbering symbol is not working, running the right command in the provided shell returns " is no directory" instead of all the file paths in the current directory, which supposed to be the correct behavior	echo *	
5	The disable behavior of quoted globbing is not handled properly, running the right command in the provided shell returns shell exception "shell: Shell not completed" instead of returning *, which supposed to be the correct behavior	echo "*"	
6	Cal does not handle invalid year inputs	1. cal -m -1 2. cal -1	
7	Valid head commands does not work on MAC platform. Error lies in hard coded file separator which was supposed to be replaced by java file.separator	head -n 1 test.txt on mac	
8	Valid tail commands does not work on MAC platform. Error lies in hard coded file separator which was supposed to be replaced by java file.separator	tail -n 1 test.txt on mac	
9	Pwd does not print newline. Required by project description.	pwd	

10	Sed does not handle unterminated regular expression.	sed s/1/s test.txt	
11	Wc does not print the filename (as they assumed the app needed to) if the file to count is sent in via the input operator "<".	wc -l < test.txt	
12	The leap year is not handled by cal. It doesn't prints 29/2	cal 2016	
13	head doesn't handle invalid options, the application still proceeds to print the lines.	1.head -p 1 test.txt (Invalid option) 2. head -n -1 test.txt (Invalid line number)	
14	tail doesn't handle invalid options, the application still proceeds to print the lines.	1.tail -p 1 test.txt (Invalid option) 2.tail -n -1 test.txt (Invalid line number)	
15	Head does not handle multiple options input.	head -n 1 -n 2 test.txt	
16	Tail does not handle multiple options input	tail -n 1 -n 5 test.txt	
17	Head does not handle invalid line numbers. It still prints 10 lines.	head -n -1 test.txt	