## Rebuttal

No	Status	Reason if invalid	Comments
1	valid	N/A	
2	valid	N/A	
3	valid	N/A	
4	valid	N/A	
5	Invalid (cal, cd, date, head, pwd, sort, tail, wc)  Valid (grep, sed)	<ul> <li>Invalid for "cal" as when no arguments are presented, it prints the current month</li> <li>Invalid for "cd" as "cd " can take in no argument hence not necessary to throw error for null arg</li> <li>Invalid for "date" as "date "does not take in any argument hence not necessary to throw error for null arg</li> <li>Invalid for "head" as exception was thrown when there is a null arg</li> <li>Invalid for "pwd" as "pwd "does not take in any argument hence not necessary to throw error for null arg</li> <li>Invalid for "sort" as exception was thrown when there is a null arg</li> <li>Invalid for "tail" as exception was thrown when there is a null arg</li> <li>Invalid for "wc" as exception was thrown</li> </ul>	½ Valid Bug
6	Valid	when there is a null arg N/A	
7	Invalid	Invalid as unix system has the same behaviour	
8	Invalid	Invalid as "date" does not take in any arguments, hence it should execute the "date" command and also throw an exception for the invalid argument.  Assumption was stated in the comment of "DateApplication.java", run()	Valid Bug
9	valid	N/A	
10	valid	N/A	
11	valid	N/A	
12	valid	N/A	
13	Valid	N/A	
14	Valid	N/A	
15	valid	N/A	
16	Valid	N/A	
17	Invalid	Stated in the assumption in the comments of "SortApplication.java", run() that the "sort" command will continue to execute the function as long as there are valid inputs and throw exception for invalid inputs	
18	Invalid	The order of the option and file can be mixed and duplicated options should be valid	
19	Valid	N/A	
20	Invalid	Duplicate with previous never throw exception bug	Valid Bug