

## Testing Design

Test Case	Purpose	
"Stone" "Money"	The purpose of this test case is to make sure that the result from the program is gives you the correct output. By sending stone and money, the solutionList's final word should equal Money.	Black Box/White Box
"mumbo" and "ghost"	The purpose of this test case is to ensure that when two words with no ladder in between them correctly throws the exception and handles the error.	White Box
"Joe" and "Bob"	The purpose of this test case is to ensure that whenever a word below the length of 5 is inputted, the program handles the error correctly	White Box
"Adsfa" and "sdfds"	The purpose of this test case is to ensure that whenever a word that is not in the dictionary is inputted, the program handles the error correctly	White Box

For Black Box testing, the functionality of the program is tested. This can be seen from the User's perspective, as he/she may not know of the internal design of the program. The purpose of this testing is to make sure the program correctly results in the specified output. By selecting money and stone, the final word of the solutionList equals the word stone, indicating the functionality of the program. In white box testing, it is seen from the developer's perspective. White box testing ensures that every single line in the program written is valid and working. The first test case can be considered white box testing as well, as it performs the main algorithm. The other test cases all make sure the different exceptions are analyzed and the code following it is executed. By implementing all four of these test cases, the programmer can verify that every single line of code is being tested and working well. The developer can also

ensure that the outputs are all correct and that, functionally, it is performing to he/she's standards.