## **MODULE TESTED:**

- 1. Sodoku (int size)
- 2. SetPossibleValues(values)
- SetCellValue(x,y,letter)
- 4. Solve()

Test	Test	Test	Pre	Test Steps	User	Actual	Additional	Status
ID	Scenario	Case	Condition	(Method)	Input	Result	Comments	
TC_01	1. n² x n² grid is made by Sudoku(n) 2. generated value set of size (n²) 3. set value of empty cell 4. Call Solve() to solve sudoku	valid size valid <b>values</b> String	integer size in range (1 to n²) No. of unique character = size²	Sudoku (size) SetPossibleValues (values)	size=3  value= {a to i}	Return True Return True	Size can be any positive value no .of values are (size 2)	
		valid <b>x,y</b> value	integer x,y in range (1 to size²)	SetCellValue (x,y,letter)	x=3 y=4 letter= f	Return True	x,y, letter are validated	PASS
		valid letter value	letter should be in value set	Solve()	No i/p	Return True	sudoku will be solved	
TC_02	<ol> <li>n² x n² grid is         made by Sudoku(n)</li> <li>generated value         set of size (n²)</li> <li>set value of empty cell</li> <li>Call Solve() to solve         sudoku</li> </ol>	valid size	integer size in range (1 to n²)	Sudoku (size)	size=3	Return True	Size can be any positive value	
		valid <b>values</b> String	No. of unique character = size <sup>2</sup>	SetPossibleValues (values)	value= {a to i}	Return True	no .of values are (size ²)	
		valid <b>x,y</b> value	integer x,y in range (1 to size²)	SetCellValue (x,y,letter)	x=3 y=4	Return	x,y, letter are validated	FAIL
		valid <b>letter</b> value	letter should be in value set	Solve()	letter= f No i/p	True Return False	sudoku will not be solved as no possible solution found	

## NOTE:

- Here, TC\_02 is only one of the best case where every method was executed successfully but Solve() method return False as no possible solutions was found.
  - 2. It's worth noting that there will be cases where Solve() will return False when one of the previous executable method (Sudoku(size), SetPossibleValues(values),SetCellValue(x,y,letter)) also return False.