## Equivalence partitioning and Boundary value analysis

In a system designed to work out the tax to be paid: An employee has \$1000 of salary tax free. The next \$500 is taxed at 10%. The next \$4000 is taxed at 22%. Any further amount is taxed by 40%. Salary cannot be larger than \$6000.

	Invalid	Tax 0%	Tax 10	Tax 22%	Tax 40%	Invalid	Invalid
Class	0\$	1\$-1000\$	1001\$-1500\$	1501\$-5500\$	5501\$-6000\$	=>6001\$	Alphabetic symbols,
EP	0	500	1250	2500	5800	6200	Special character, Decimal
BVA	0	1 1000	1001 1500	1501 5500	5501 6000	6001	numbers

softserve

## **Test Items**

#	Test Items	Test data		
1	Verify that salary up to 1000\$ is tax free	<ol> <li>Any number from 1 to 1000 (e.g. 500)</li> <li>1</li> <li>1000</li> </ol>		
2	Verify that tax rate 10% if employee has salary from 1001\$ to 1500\$	<ol> <li>Any number from 1001 to 1500 (e.g. 1250)</li> <li>1001</li> <li>1500</li> </ol>		
3	Verify that tax rate 22% if employee has salary from 1501\$ to 5500\$	<ol> <li>Any number from 1501 to 5500 (e.g. 2500)</li> <li>1501</li> <li>5500</li> </ol>		
4	Verify that tax rate 40% if employee has salary from 5501\$ to 6000\$	<ol> <li>Any number from 5501 to 6000 (e.g. 5800)</li> <li>5501</li> <li>6000</li> </ol>		
5	Verify that error message appears if employee enters invalid data	1) 0 2) Any negative number (e.g1) 3) 6001 3) Any number >6001 (e.g. 6200) 4) Special characters 5) Alphabetic characters 6) Decimal numbers (e.g. 25.56) 7) Space		
6	Verify that error message is displayed if employee left 'Salary' field empty			