

Discount Example Boundary Value Testing

Answer:

The question is to calculate $\text{final_amount} = f(\text{Member_status}, \text{product_value})$. We should apply Boundary Value Analysis to Member_status, product_value and final_amount.

Case#	Member_status	product_value	final_amount	Notes
1	100(invalid)	0	invalid	
2	A(invalid)	0	invalid	
3	N(valid)	-0.01K -10	Invalid	
4		0	0	
5		0.01K 10	0.01k 10	
6	R(valid)	-0.01K -10	Invalid	5% discount
7		0	0	
8		0.01K 10	0.0095k 9.5	
9		0.99K 990	0.9405k 940.5	
10		1k 1,000	0.95k 950	
11		1.01K 1,010	0.909k 909	10% discount
12		4.99K 4,990	4.491k 4,491	
13		5K 5,000	4.5k 4,500	
14		5.01K 5,010	4.2585k 4,258.5	15% discount
15	G(valid)	-0.01K -10	Invalid	10% discount
16		0	0	
17		0.01K 10	0.009k 9	
18		0.99K 990	0.891k 891	
19		1k 1,000	0.9k 900	
20		1.01K 1,010	0.8585k 858.5	15% discount
21		4.99K 4,990	4.2415k 4,241.5	
22		5K 5,000	4.25k 4,250	
23		5.01K 5,010	4.008k 4,008	20% discount
24		9.99K 9,990	7.992 7,992	
25		10.00k 10,000	8 8,000	
26		10.01K 10,010	7.5075 7,507.5	25% discount