

Equivalence Partitioning:

A system designed for replenishing mobile phone where min replenishment is 5\$ and max replenishment is 1000\$. There is no commission if user enters less than 50\$. User will pay 1% of replenishment when it is less than 500\$. In case the replenishment is equal or bigger than 500\$, the user will pay 3% of commission.

	Invalid	Valid without commission	Valid for 1% commission	Valid for 3% commission	Invalid
Class	\$0 - \$4	\$5 - \$49	\$50 - \$499	\$500 - \$1000	>\$1000
EP	2	25	225	750	1300

#	Condition	Expected result
1	Put value "2" into input field	Error message appears "You have entered an incorrect value of the amount of money".
2	Put value "25" into input field	Mobile phone replenished without commission.
3	Put value "225" into input field	Mobile phone replenished with 1% commission.
4	Put value "750" into input field	Mobile phone replenished with 3% commission.
5	Put value "1300" into input field	Error message appears "You have entered an incorrect value of the amount of money".

Boundary Values Analysis:

	Invalid	Valid without commission	Valid for 1% commission	Valid for 3% commission	Invalid
Class	\$0 - \$4	\$5 - \$49	\$51 - \$499	\$500 - \$1000	>\$1000
EP	0 4	5 49	50 499	500 1000	1300

#	Condition	Expected result
1	Put value "0" into input field	Error message appears "You have entered an incorrect value of the amount of money".
2	Put value "4" into input field	Error message appears "You have entered an incorrect value of the amount of money".
3	Put value "5" into input field	Mobile phone replenished without commission.
4	Put value "49" into input field	Mobile phone replenished without commission.
5	Put value "50" into input field	Mobile phone replenished with 1% commission.
6	Put value "499" into input field	Mobile phone replenished with 1% commission.
7	Put value "500" into input field	Mobile phone replenished with 3% commission.
8	Put value "1000" into input field	Mobile phone replenished with 3% commission.
9	Put value "1300" into input field	Error message appears "You have entered an incorrect value of the amount of money".

EP and BVA: Test Items

#	Test Items	Test Data
1	Verify that replenishing mobile phone is without commission if value of the amount of money from \$5 to \$49	<ol style="list-style-type: none"> 1. Any number from 5 to 49 (e.g. 25) 2. 5 3. 49
2	Verify that replenishing mobile phone is with 1% commission if value of the amount of money from \$50 to \$499	<ol style="list-style-type: none"> 1. Any number from 50 to 499 (e.g. 225) 2. 50 3. 499
3	Verify that replenishing mobile phone is with 3% commission if value of the amount of money more than %500	<ol style="list-style-type: none"> 1. Any number from 500 (e.g. 750) 2. 500 3. 1000
4	Verify that error message "You have entered an incorrect value of the amount of money" appears if client enters incorrect data.	<ol style="list-style-type: none"> 1. Any number <0 (e.g. -2) 2. 0 3. Any number <4 (e.g. 2) 4. 4 5. Any number >1000 (e.g. 1300) 6. Special characters 7. Alphabetic characters
5	Verify that error message appears if client leaves "Replenishment" field empty	

Decision Table:

You want to buy travel card of some transport network (works during 1 month). The following types of discount exist:

- For Student – gives you 20% discount if you are student;
- Pensioner– gives you 10% discount, available if you are 60 years old and more (cannot be used with Student discount)

You can get additional 5% discount if you are buying such travel cards during the last 6 months in a row.

<u>Causes (Inputs)</u>	R1	R2	R3	R4	R5	R6	R7	R8
<i>Card for Student?</i>	Y	Y	Y	Y	N	N	N	N
<i>Card for Pensioner?</i>	Y	Y	N	N	Y	Y	N	N
<i>Buying such travel cards during the last 6 months?</i>	Y	N	Y	N	Y	N	Y	N
<u>Effects (Outputs)</u>								
<i>Discount (%)</i>	25	20	25	20	15	10	5	0
<i>Message *</i>	+	+						

#	Condition	Outcome
1	A person who has a card for students & card for pensioner & buying such travel cards during the last 6 months?	25% will be given for both tickets.
2	A person who has a card for students & card for pensioner or only card for students?	20% will be given for both tickets.
3	A person who has a card for pensioner & buying such travel cards during the last 6 months?	15% will be given for both tickets.
4	A person who has a card for pensioner?	10% will be given for both tickets.
5	A person who has buying such travel cards during the last 6 months?	5% will be given for both tickets.
5	A person who doesn't have a card for students & card for pensioner & doesn't buy such travel cards during the last 6 months?	No discount (0%)

State Transition:

