**Equivalence partitioning and Boundary values analysis**

To calculate the electricity cost user should enter an old and a new values of electricity counter and press “Calc” button. It works only if values are entered correctly:

* Contain only digits;
* No longer than 6 digits;
* New value is not less than an old value.

1. **Build equivalence classes (partitions) based on given information**

|  |  |  |
| --- | --- | --- |
| ***(Old value) Valid for*** | ***(New value >= Old Value) Valid for*** | ***Invalid for*** |
| >= 1 <= 6 digits | >= 1 <= 6 digits | >6 digits |
| >= 0 <=999999 | >= 0 <=999999 | >=1000000 |
| 499998 | 502989 | 5000005 |

***Example of other invalid values:*** -567045, MC256456, !@#$%&, ABCDEF, %256456#, 256.456

1. **Stand Out Boundary Values**

|  |  |  |
| --- | --- | --- |
| ***(Old value) Valid for*** | ***(New value >= Old Value) Valid for*** | ***Invalid for*** |
| 1 6 digits | 1 6 digits | 7 digits |
| 0 499998 | 499999 999999 | 1000000 |