

# Equivalence Class & Boundary Value

## GUIDE

Work out an equivalence class partitioning and boundary value analysis for Blackbox testing of your program. Explain all the equivalence classes, examples of boundary/middle values in each equivalence class and the rationale behind your choices.

## RESPONSE

In the table below, we consider 3 example cases. Given the unique combination exists in both csv files, we check 3 types of balance values (lower, equal, and higher than 1<sup>st</sup> csv file). Account records have 2 possible outcomes (exception or not-exception). In the case where there is an exception, we take the 2 boundary values, whereby the balances are not equal, and one is greater/lower than the other.

For 1<sup>st</sup> row, given the same unique combination, the balance of 2<sup>nd</sup> csv is lower than that of the 1<sup>st</sup> csv, making this equivalence class pair a “lower” bound.

For 2<sup>nd</sup> row, given the same unique combination, the balance of 2<sup>nd</sup> csv is equal to that of the 1<sup>st</sup> csv, making this equivalence class pair the “middle”.

For 3<sup>rd</sup> row, given the same unique combination, the balance of 2<sup>nd</sup> csv is higher than that of the 1<sup>st</sup> csv, making this equivalence class pair a “higher” bound.

No.	Account from 1 <sup>st</sup> csv	Account from 2 <sup>nd</sup> csv	Supposed outcome
1	Customer ID = “ID1” Account No. = “BOS12345” Currency = “USD” Type = “SAVINGS” Balance = “1000”	Customer ID = “ID1” Account No. = “BOS12345” Currency = “USD” Type = “SAVINGS” Balance = “500”	Write these 2 records into the new csv file as the balance for 2 <sup>nd</sup> csv is lower than that of the 1 <sup>st</sup> csv for that unique account.
2	Customer ID = “ID1” Account No. = “BOS12345” Currency = “USD” Type = “SAVINGS” Balance = “1000”	Customer ID = “ID1” Account No. = “BOS12345” Currency = “USD” Type = “SAVINGS” Balance = “1000”	These 2 records will not be written into the new csv file as the unique combination matches as well as the balance
3	Customer ID = “ID1” Account No. = “BOS12345” Currency = “USD” Type = “SAVINGS” Balance = “1000”	Customer ID = “ID1” Account No. = “BOS12345” Currency = “USD” Type = “SAVINGS” Balance = “2000”	Write these 2 records into the new csv file as the balance for 2 <sup>nd</sup> csv is higher than that of the 1 <sup>st</sup> csv for that unique account.