**Test Cases for the Rules Engine:**

Below are the test cases for the rules engine for the given data sheet.

Before going into the test cases directly, we’ll take the format of the test cases

signal,column,operator,value,datatype

1. Positive Test Cases
2. ATL1 type of signal which has value HIGH

Representation of the above test case should be present in the rules.ini file as below

ATL2,value,=,HIGH,string

1. ATL5 type of signal which is less than 2017-Feb-20 00:00:00

Representation of the above test case in the rules.ini should be like below

ATL5,value,<,2017-02-20 00:00:00,datetime

1. ATL6 type of signal whose value is more than 100

Representation of the above test case in the rules.ini should be like below

ATL6,value,>,100,integer

1. Negative Test Cases
2. Using an invalid operator for a string type

ATL4,value,<,LOW,string

ATL7,value,>,HIGH,string

ATL8,value,>=,HIGH,string

1. Using an invalid datatype in the test case representation

ATL10,value,>,280,float

ATL3,value,<=,400,xyz

1. Invalid Operator test cases

ALT6,value,<,HIGH,string

ATL4,value,&,250,integer

ATL1,value,\*,2019-01-20 18:00:00

There could be as many as rules executed, which contain the data in the above format in the rules.ini file