AwesomeDT

UiPath
Robotic Process Automation

Awesome Query language

A new Language for Custom activity on Data table manipulation in simple text using UiPath

Problem Statement

UiPath RPA Developers ,

Daily working with Data Tables (Table in Memory), Data Table might be out put of Excel File (Read Range) or Might be Structure Data From Web or Output of CSV File or Output Of DataBase.

Developers do data table manipulation's based on business requirement, its like

- Remove Duplicates
- Sort Order
- Merge Multiple Data Tables
- Filter Data Table using Criteria
- Create New Custom Columns
- Select Top N Records
- Interduce Serial Number Column …etc.

To Satisfy this type of Business Requirement Developers have to use Lot Of Code and it is Time Consuming Process and not user friendly

Solution is here

Using AwesomeDT Custom Activity, RPA Developers can Perform Series Of Data Table Operations on One Go with very less development time

Development Time Reduces from

Hours -> Minutes

Awesome Query Language

Create Consolidated Data Tables merging a list of multiple data tables where we can also
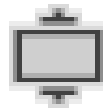
- Dynamically Create new columns on the fly
- Apply filter based on some conditions
- Sort the data table by desc, asc
- Top N Rows
- Apply Excel formula on the fly
- Remove duplicates
- Create New Serial Number Column
- Etc....

How to Use

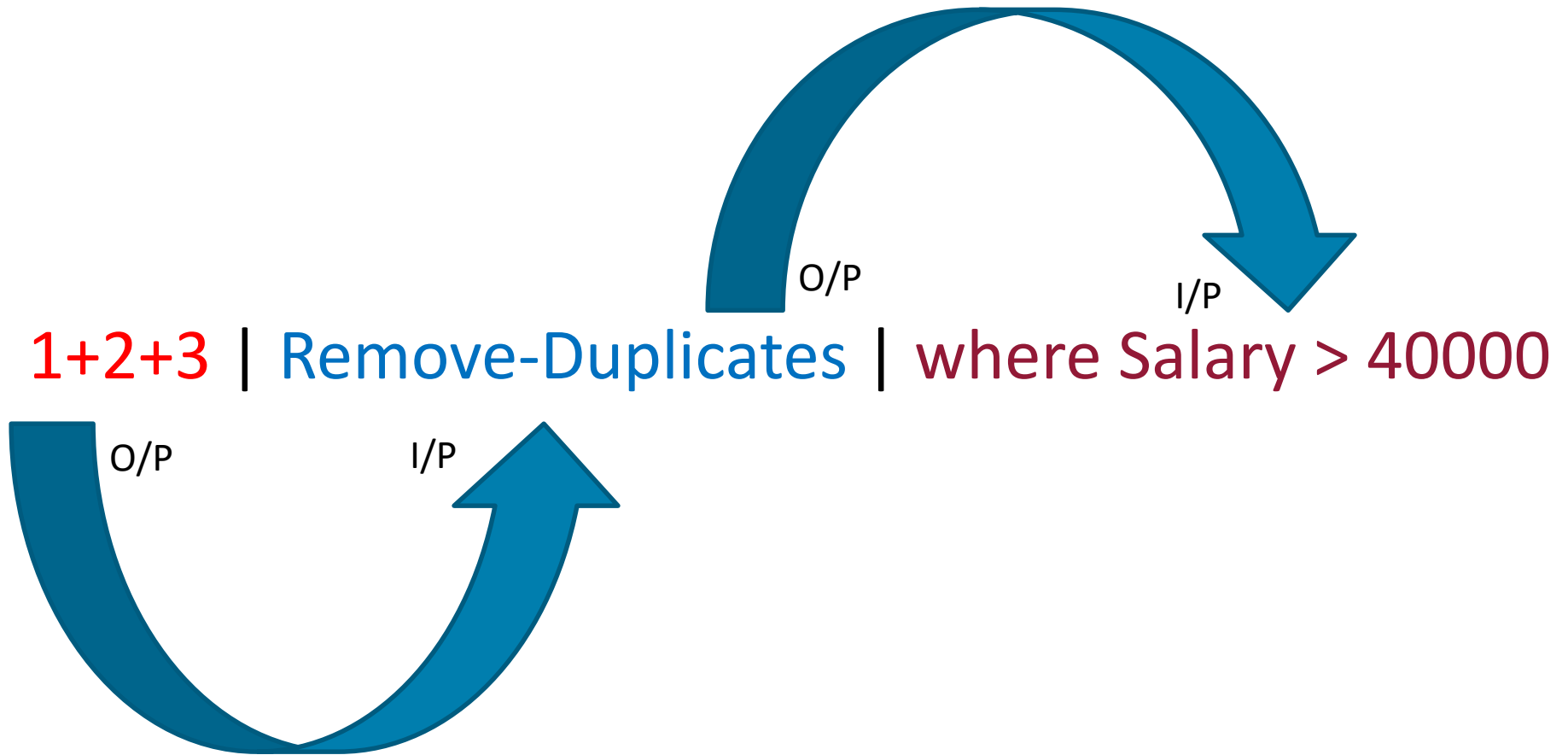InputDTList : (List<DataTables>)

AQLString (String)

◢ AwesomeDT

▢ OneDT

ResultDT (Data Table)

AQLString

1+2+3 | Remove-Duplicates | where Salary > 40000

Awesome Query Language

Name	Syntax	Example	Description
Merge	DT1+DT2+DT3+DT4	1+2+3+4	Using Mathematical Operators Like (+) Plus Easily Do Merge
Remove Duplicate Rows	Remove-Duplicates	Remove-Duplicates	It will remove all duplicate rows from the input data table
Select Specific Columns	Select [Column List]	Select Employee, Salary, Department	Select only specific columns from the data table
On the Fly Columns	Select [new Column Name] = [Formula]	Select Price, Qty, Total=Price*Qty	Can apply any formula or expression using header names
Filter	Where [Column Name] (Operator) [Value/Expression]	Where Salary >50000	By using where keyword can use all kind of filter conditions like <, >, >=, <=, StartsWith, EndsWith, IsEmpty, Contains, Not Contains
Top N	Top N	Top 10	It will show top 10 rows from the Data Table
Auto Increment (Row Num)	[Column Name] =Row ([Column Name])	Select SNo=Row(SNo)	On the fly Row Number will generate with auto increment by 1
Excel Formulas	Select [New Column Name] =[Excel Formula]	Select EmployeeLength=Len(Employee)	Apply any excel formula with column headers
Order By	Order By [Column Name] [OrderType]	Order By Employee Desc	Arrange data table using column any order type (Descending / Ascending) By Default its Ascending Order)

AQLString

Let's say there are 3 different data tables with same schema then we can apply a series of operations as mentioned below using this custom activity

1+2+3 | Remove-Duplicates | where Salary > 40000 | Order By Salary Desc | Select SNo=Row (SNo), FirstName, LastName, EmployeeName=FirstName&LastName, Salary, EmployeeType , YearlySalary =Salary*12 | Top 5

Note: the above use case is just an example to show that we can create any such series of operations on the fly with this custom activity

In general, the same series of operation will take around **8 to 10 hours** if performed manually. With this custom activity it will take **just take few seconds** to form this query using AQL.

For More Help

https://www.youtube.com/uipathlearner

Thank You