LINQ

Remove Duplicate Rows From DataTable
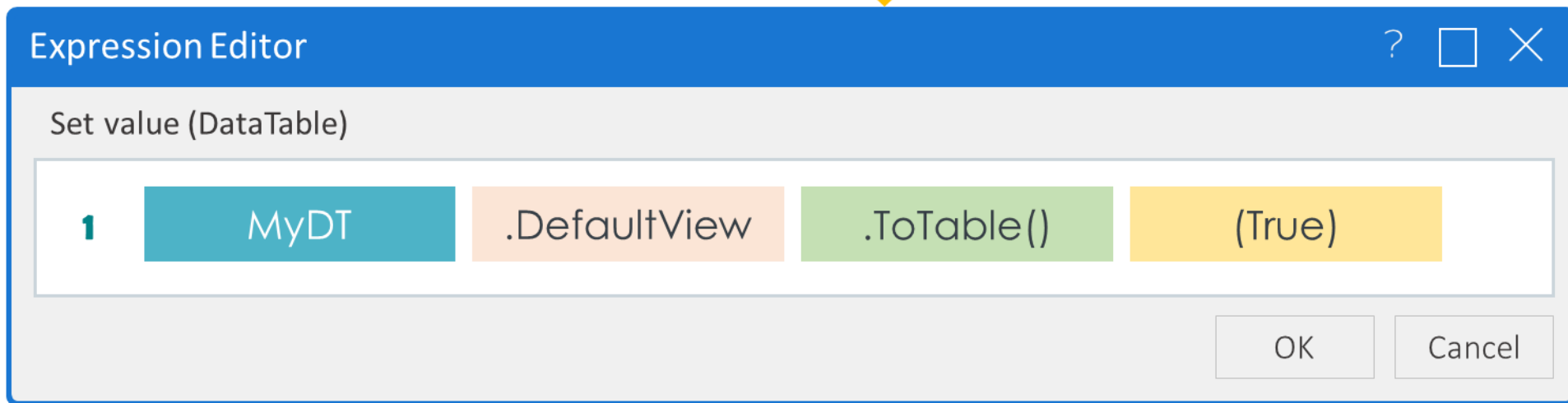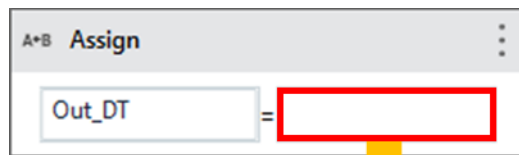
Mahmoud Dawod

Use Case

- Remove duplicate rows from a DataTable using one column (**ID**)
- The original table is: **MyDT**
- The new table (output table) is: **Out_DT**

ID	Name	Department
1	Max	IT
2	Jasmin	HR
2	Jasmin	HR
3	Alex	Controlling
4	Lara	Finance
1	Max	IT
3	Alex	Controlling
5	Mahmoud	IT
4	Lara	Finance

Out_DT

ID	Name	Department
1	Max	IT
2	Jasmin	HR
3	Alex	Controlling
4	Lara	Finance
5	Mahmoud	IT

Automate

Assign

Out_DT = [ ]

Expression Editor   ?   □   ✕

Set value (DataTable)

1   MyDT   .DefaultView   .ToTable()   (True)

OK   Cancel

Remove duplicate rows using
all columns of the table

Automate

Assign

Out_DT =

Expression Editor   ? □ ✕

Set value (DataTable)

1 MyDT .AsEnumerable .DistinctBy (Function(d) d("ID").ToString) .CopyToDataTable
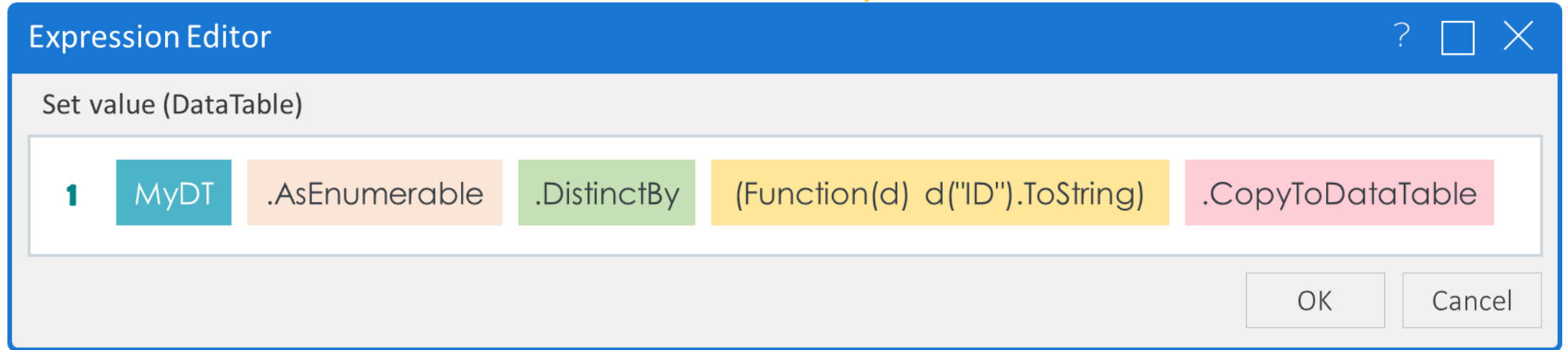
OK   Cancel

Remove duplicate rows using one column ("ID")

Assign

Out_DT =

Expression Editor

Set value (DataTable)

1 (

2 From | row | In | MyDT

3 Select | row

4) | .DistinctBy(Function(d) d("ID").ToString) | .CopyToDataTable()

OK   Cancel

5

Automate

A→B Assign

Out_DT =

Expression Editor   ? □ ✕

Set value (DataTable)

1	(			
2	From	row	In	MyDT
3	Group	row	By a = row("ID").ToString	Into grp = Group
4	Select	grp	.First()	
5	)	.CopyToDataTable()		

OK   Cancel

Automate

A+B **Assign**

Out_DT = [   ]

Expression Editor   ? ☐ ✕

Set value (DataTable)

1	(			
2	From	row	In	MyDT
3	Group	row	By a = row("ID").ToString	Into grp = Group
4	Select	grp	.FirstOrDefault()	
5	)	.CopyToDataTable()		

OK   Cancel

Automate

Assign

Out_DT = [ ]

Expression Editor

? □ ✕

Set value (DataTable)

1	(			
2	From	row	In	MyDT
3	Group	row	By a = row("ID").ToString	Into grp = Group
4	Select	grp	.ElementAt(0)	
5	)	.CopyToDataTable()		

OK   Cancel

Automate

Assign

Out_DT = [ ]

Expression Editor

? □ ✕

Set value (DataTable)

1	(			
2	From	row	In	MyDT
3	Group	row	By a = row("ID").ToString	Into grp = Group
4	Select	grp	.ElementAtOrDefault(0)	
5	)	.CopyToDataTable()		

OK   Cancel

Automate

Assign

Out_DT =

Expression Editor

? □ ✕

Set value (DataTable)

1	(			
2	From	row	In	MyDT
3	Group	row	By a = row("ID").ToString	Into grp = Group
4	Select	grp	.ElementAt(grp.Count-1)	
5	)	.CopyToDataTable()		

OK   Cancel

Automate

A+B **Assign**

Out_DT = [   ]

Expression Editor   ? □ ✕

Set value (DataTable)

1	(			
2	From	row	In	MyDT
3	Group	row	By a = row("ID").ToString	Into grp = Group
4	Select	grp	.ElementAtOrDefault(grp.Count-1)	
5	)	.CopyToDataTable()		

OK   Cancel

Automate

Assign

Out_DT = [ ]

Expression Editor   ? □ ✕

Set value (DataTable)

1	(			
2	From	row	In	MyDT
3	Group	row	By a = row("ID").ToString	Into grp = Group
4	Select	grp	.Take(1)	.ElementAt(0)
5	)	.CopyToDataTable()		

OK   Cancel

Automate

Assign

Out_DT =

Expression Editor

? □ ✕

Set value (DataTable)

1	(			
2	From	row	In	MyDT
3	Group	row	By a = row("ID").ToString	Into grp = Group
4	Select	grp	.TakeLast(1)	.ElementAt(0)
5	)		.CopyToDataTable()	

OK   Cancel

Automate

Assign

Out_DT =

Expression Editor

? □ ✕

Set value (DataTable)

1	(			
2	From	row	In	MyDT
3	Group	row	By a = row("ID").ToString	Into grp = Group
4	Select	grp	.Take(1)	.First()
5	)		.CopyToDataTable()	

OK   Cancel

Automate

A+B **Assign**

Out_DT = [   ]

Expression Editor   ? ☐ ✕

Set value (DataTable)

1	(			
2	From	row	In	MyDT
3	Group	row	By a = row("ID").ToString	Into grp = Group
4	Select	grp	.TakeLast(1)	.First()
5	)	.CopyToDataTable()		

OK   Cancel

15

Automate

Assign

Out_DT = [ ]

Expression Editor ? □ ✕

Set value (DataTable)

1	(			
2	From	row	In	MyDT
3	Group	row	By a = row("ID").ToString	Into grp = Group
4	Let	x	= grp.First()	
5	Select	x		
6	)	.CopyToDataTable()		

OK   Cancel

15

A+B **Assign**   ⋮

Out_DT = [   ]

⬇

Expression Editor   ? ▢ ✕

Set value (DataTable)

1	(			
2	From	row	In	MyDT
3	Group	row	By a = row("ID").ToString	Into grp = Group
4	Let	x	= grp.FirstOrDefault()	
5	Select	x		
6	)	.CopyToDataTable()		

OK   Cancel

Automate

Assign

Out_DT = [   ]

Expression Editor   ? □ ✕

Set value (DataTable)

1   (

2   From   row   In   MyDT

3   Group   row   By a = row("ID").ToString   Into grp = Group

4   Let   x   = grp.ElementAt(0)

5   Select   x

6   )   .CopyToDataTable()

OK   Cancel

Automate

Assign

Out_DT = [   ]

Expression Editor

? □ ✕

Set value (DataTable)

1	(			
2	From	row	In	MyDT
3	Group	row	By a = row("ID").ToString	Into grp = Group
4	Let	x	= grp.ElementAt(grp.Count - 1)	
5	Select	x		
6	)	.CopyToDataTable()		

OK   Cancel

Assign

Out_DT =

Expression Editor

Set value (DataTable)

1   (

2   **From**   row   **In**   MyDT

3   **Group**   row   By a = row("ID").ToString   Into grp = Group

4   **Let**   x   = grp.SkipLast(grp.Count − 1)

5   **Select**   x   .ElementAt(0)

6   )   .CopyToDataTable()

OK   Cancel

Assign

Out_DT =

Expression Editor

Set value (DataTable)

1   (

2   From   row   In   MyDT

3   Group   row   By a = row("ID").ToString   Into grp = Group

4   Let   x   = grp.SkipLast(grp.Count – 1)

5   Select   x   .First()

6   )   .CopyToDataTable()

OK   Cancel

Automate

A+B Assign

Out_DT = [   ]

Expression Editor   ? □ ✕

Set value (DataTable)

1	(

2	From	row	In	MyDT
3	Group	row	By a = row("ID").ToString	Into grp = Group
4	Let	x	= grp.SkipLast(grp.Count – 1)	
5	Select	x	.FirstOrDefault()	
6	)	.CopyToDataTable()		

OK   Cancel

Automate

Assign

Out_DT = [   ]

Expression Editor

Set value (DataTable)

1	(

2	**From**	row	**In**	MyDT

3	**Group**	row	By a = row("ID").ToString	Into grp = Group

4	**Let**	x	= grp.SkipLast(grp.Count − 1)

5	**Select**	x	.Last()

6	)	.CopyToDataTable()

OK   Cancel

A+B Assign

Out_DT = [   ]

Expression Editor

? □ ✕

Set value (DataTable)

1	(			
2	From	row	In	MyDT
3	Group	row	By a = row("ID").ToString	Into grp = Group
4	Let	x	= grp.SkipLast(grp.Count − 1)	
5	Select	x	.FirstOrDefault()	
6	)		.CopyToDataTable()	

OK   Cancel

Automate

Assign

Out_DT = [   ]

Expression Editor

? □ ✕

Set value (DataTable)

1	(			
2	From	row	In	MyDT
3	Group	row	By a = row("ID").ToString	Into grp = Group
4	Let	x	= grp.SkipLast(grp.Count – 1)	
5	Select	x	.LastOrDefault()	
6	)	.CopyToDataTable()		

OK   Cancel

Automate

Assign

Out_DT = [ ]

Expression Editor

? □ ✕

Set value (DataTable)

1	(

2	From	row	In	MyDT

3	Group	row	By a = row("ID").ToString	Into grp = Group

4	Let	x	= grp.SkipLast(grp.Count − 1)

5	Select	x	.Single()

6	)	.CopyToDataTable()

OK   Cancel

Automate

Assign

Out_DT =

Expression Editor

? □ ✕

Set value (DataTable)

1	(

2	From	row	In	MyDT
3	Group	row	By a = row("ID").ToString	Into grp = Group
4	Let	x	= grp.SkipLast(grp.Count − 1)	
5	Select	x	.SingleOrDefault()	
6	)	.CopyToDataTable()		

OK   Cancel