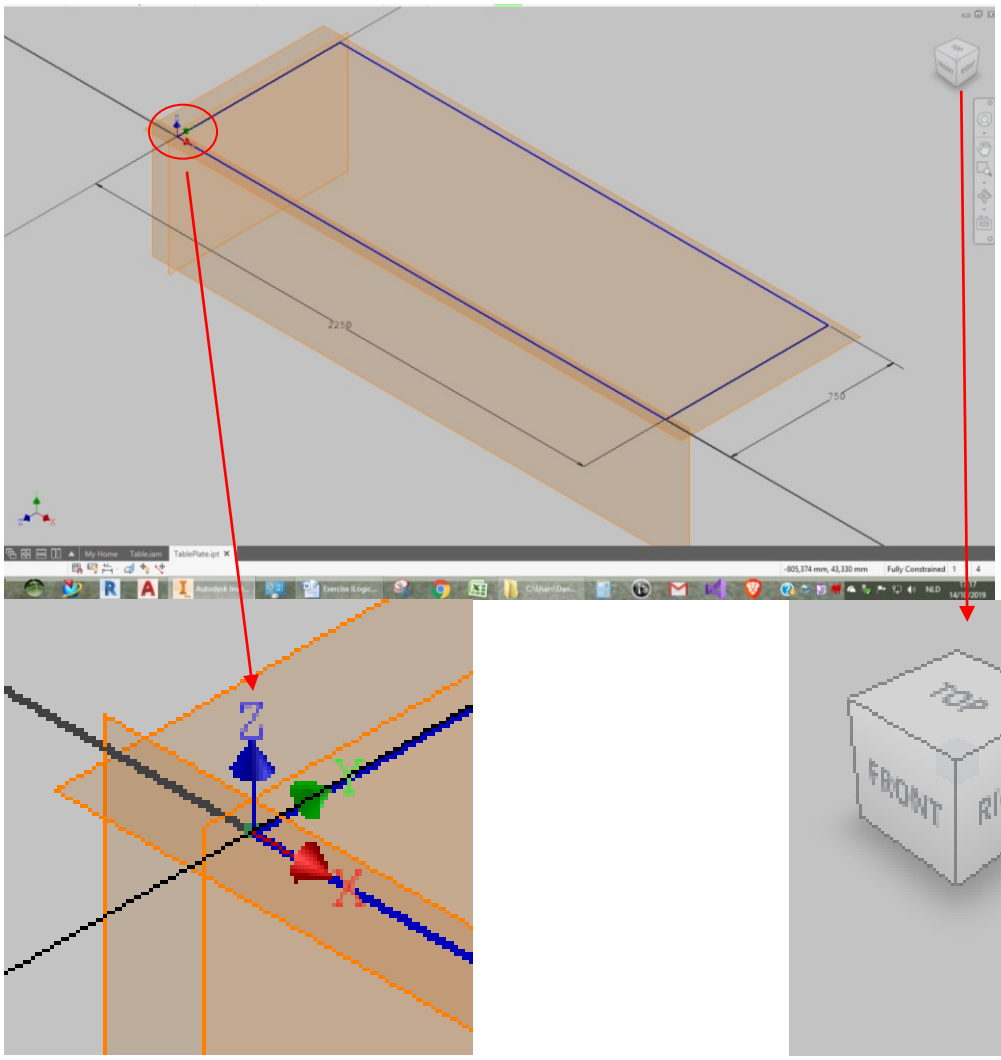
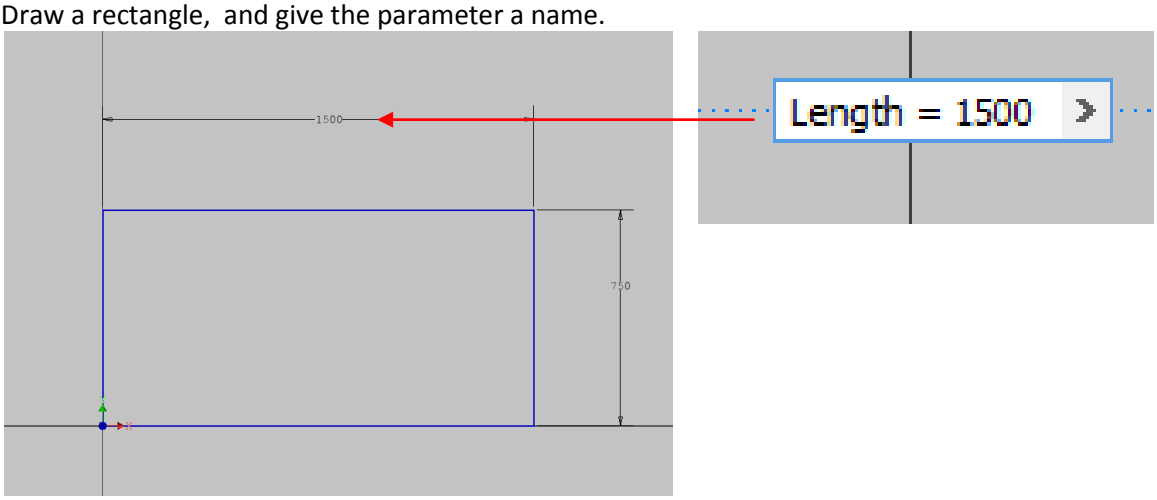
Exercise ILogic Table.

Start with a new part.

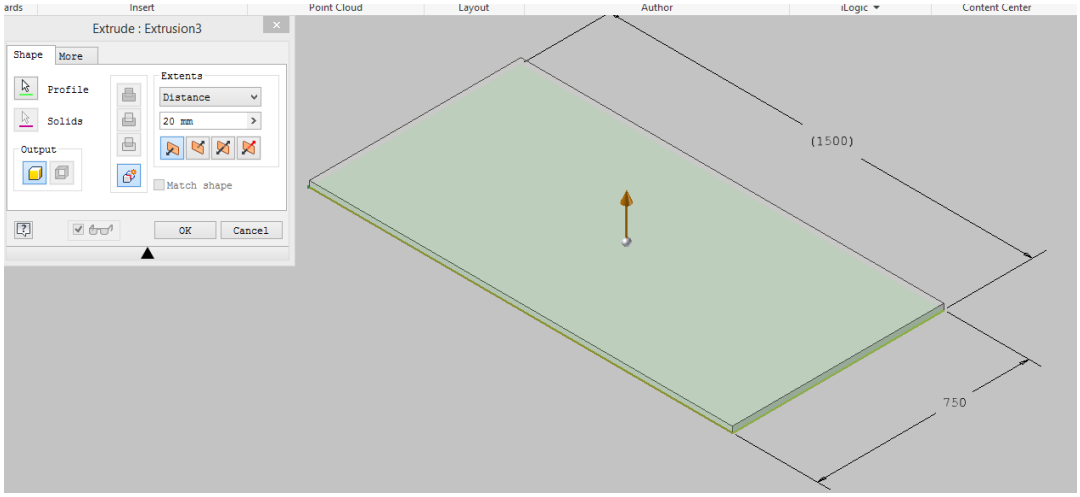
Select plane to create a sketch.



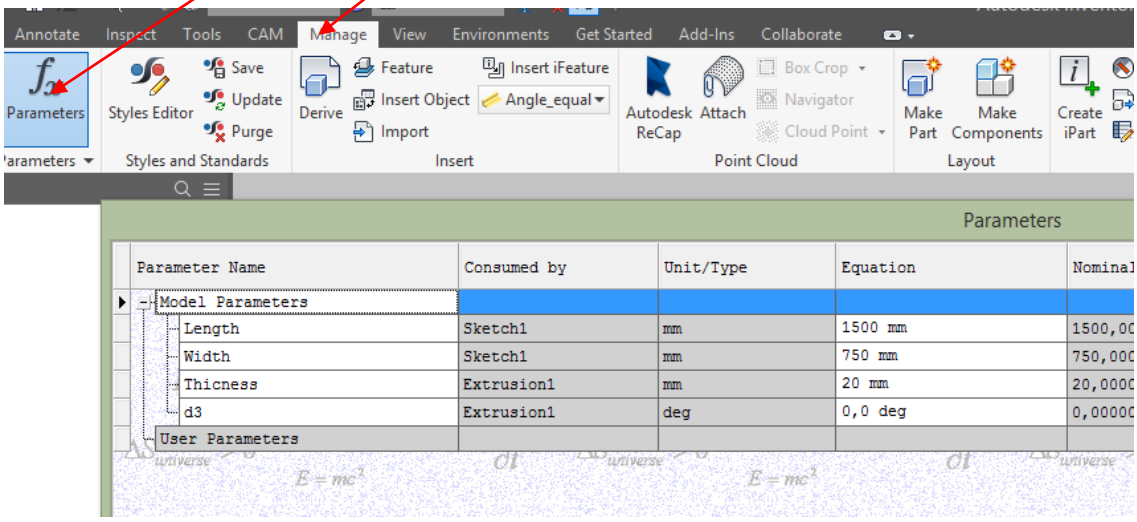
Draw a rectangle, and give the parameter a name.



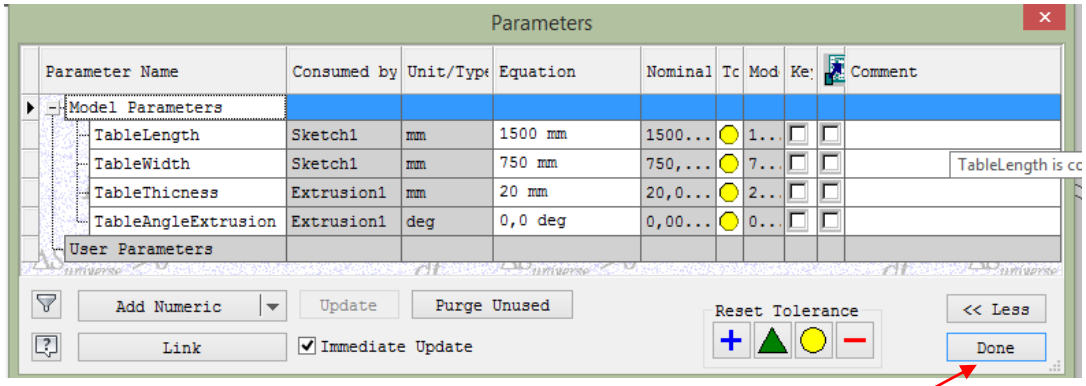
Length = 1500 mm, Width = 750 mm, Thicness = 20 mm.



Then go to Manage next,
click on the icon Parameters.



You can se ether is stil a parameter d3, and that is the angle of extrusion. It is always goed to giv it a name. So we will. But because we are going to work with an assembly, we will give all the parameters a name that will be very clear.

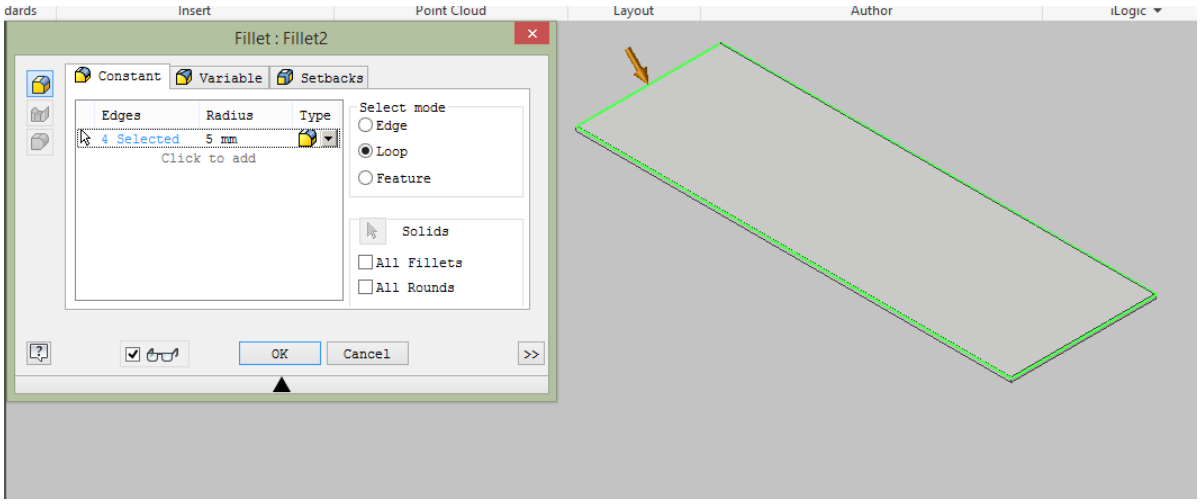


TableLength , TableWidth , TableThicness , TableAngleExtrusion

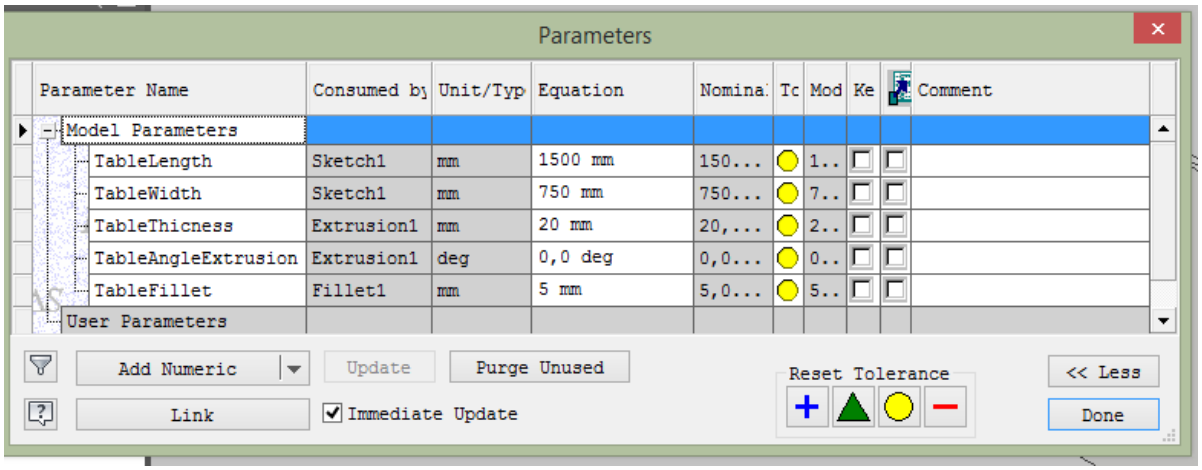
Next click Done.

Next make a fillet 5mm, you already know how to give this parameter a name.

Choose Loop.

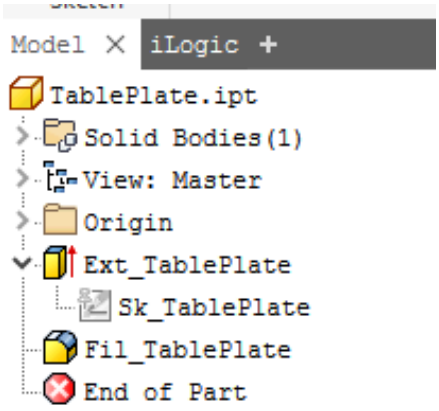


When you go to Manage – Parameters you should see this.



I did make a folder : Table.
It's for the best, you put everything we will make in the same folder.
Next is making the table leg.

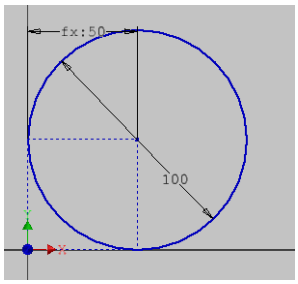
It can't hurt,
to change the names
in the Model Explorer.

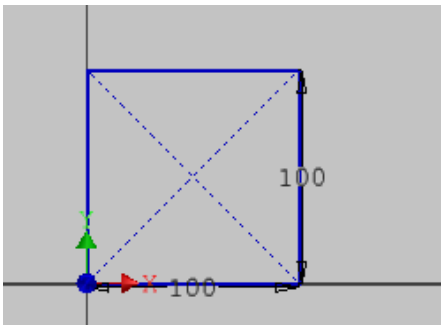


Save as TablePlate.

Now we will make two kinds of table legs.

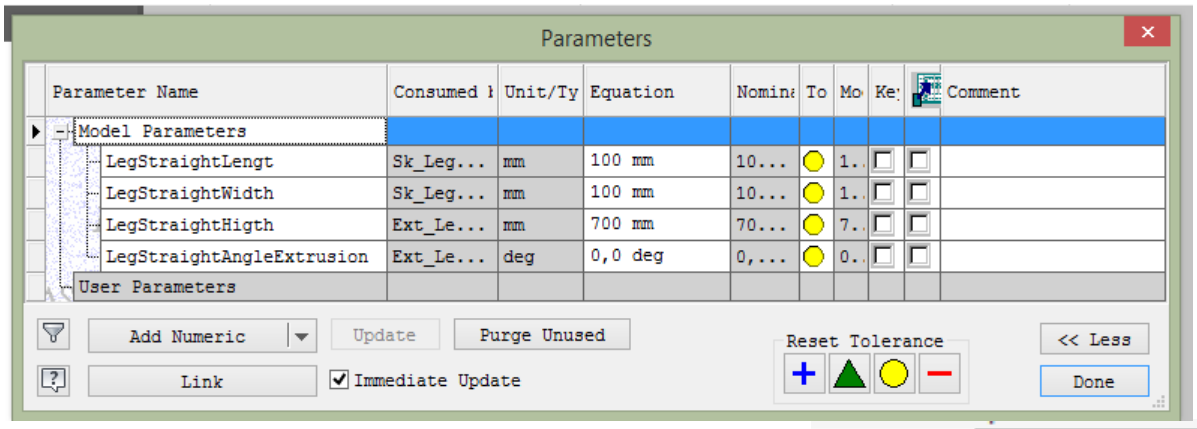
- Table leg straight
- Round table leg



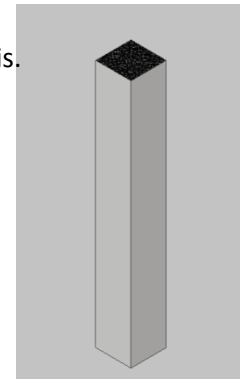


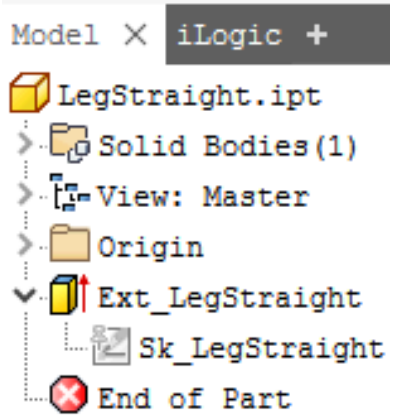
Start a new part.

LegStraight.

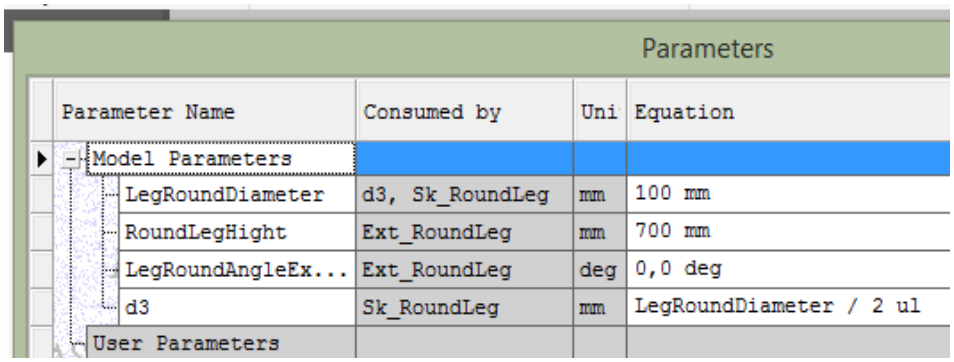


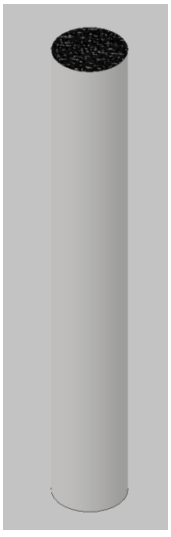
The top of the leg is a different collor.
So I always now how the position of the leg is.
Just click on the plane,
Then right click,
Next click properties,
Next choose a color.





LegRound.

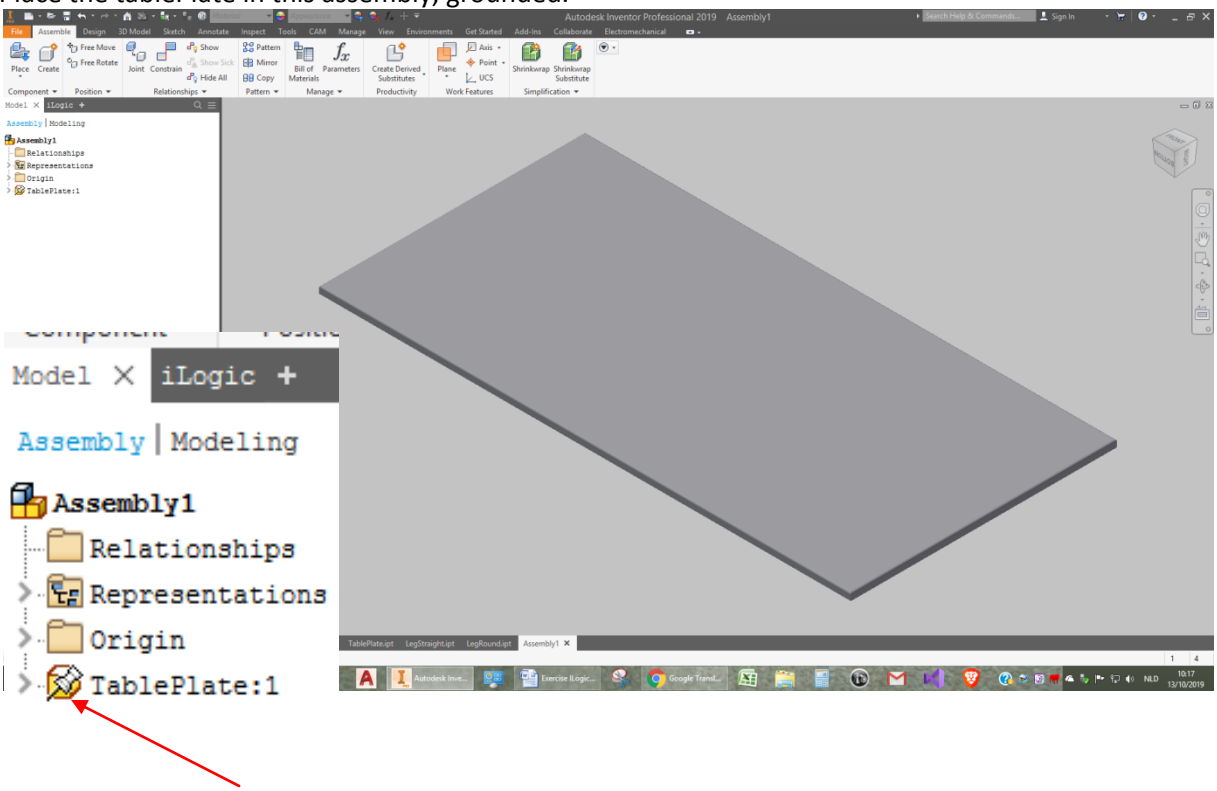




New Assembly

Save it, name is: Table.

Place the tablePlate in this assembly, grounded.



You can see it is grounded.

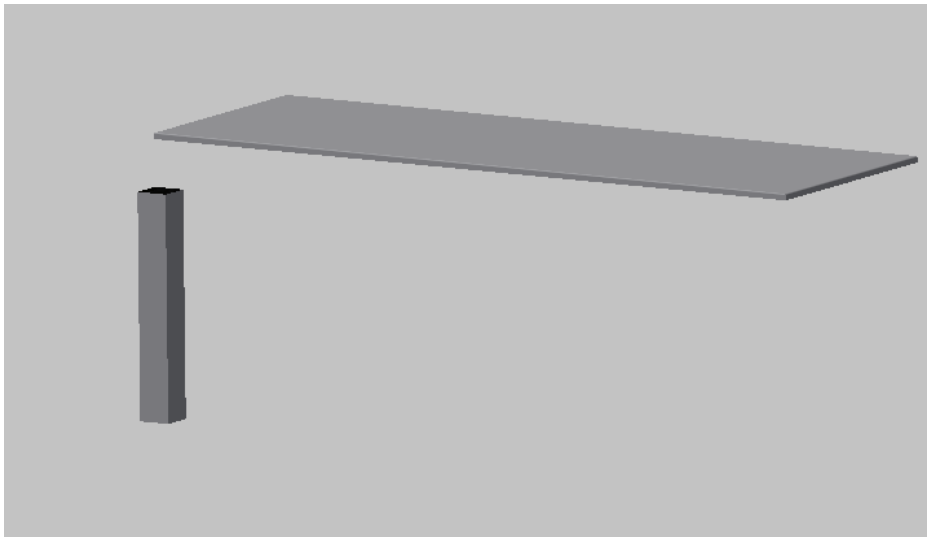
Next place the Leg Straight,

just place it, it doesn't matter where.

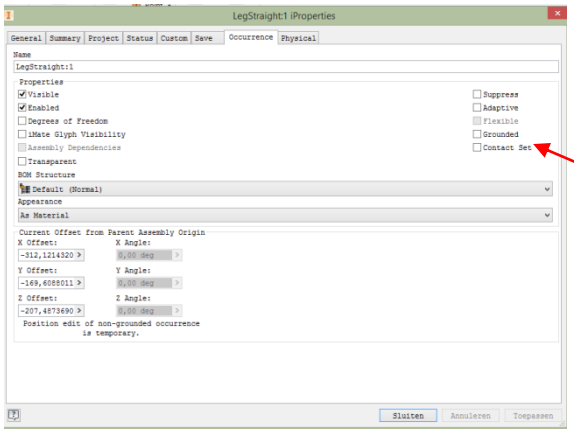
Next click

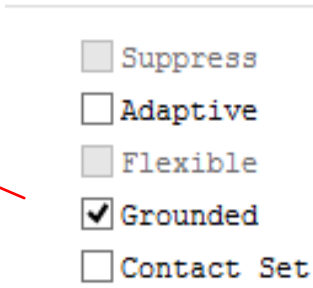
rightmouseclick LegStraight

Next click : iproperties …



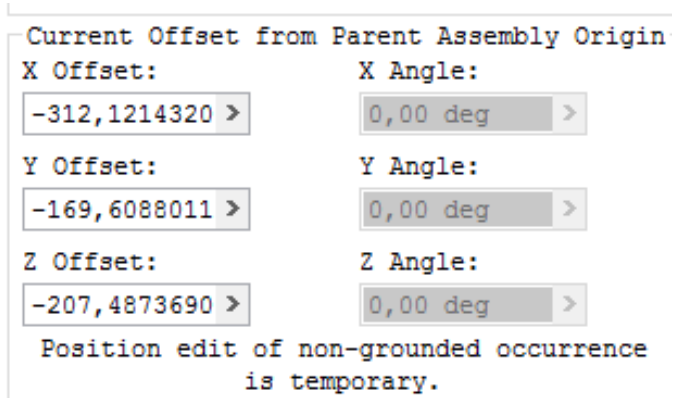
Next click Tab : occurrence

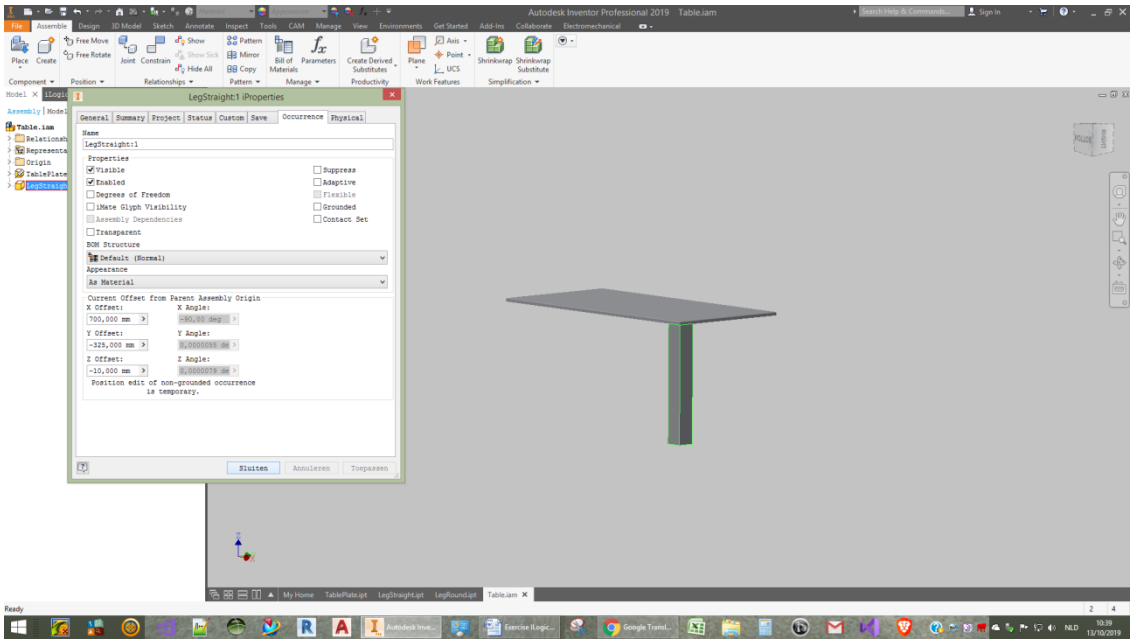




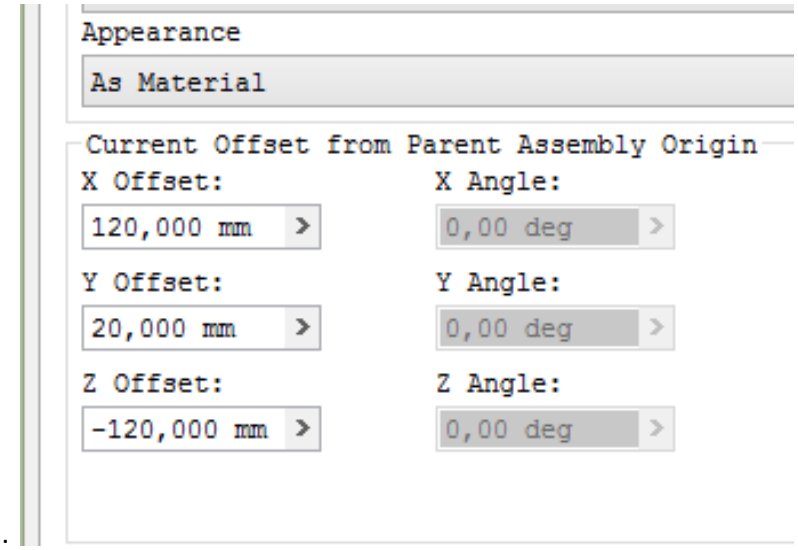
Choose Grounded.

This positions wil be not the same in your model, but that does not matter.





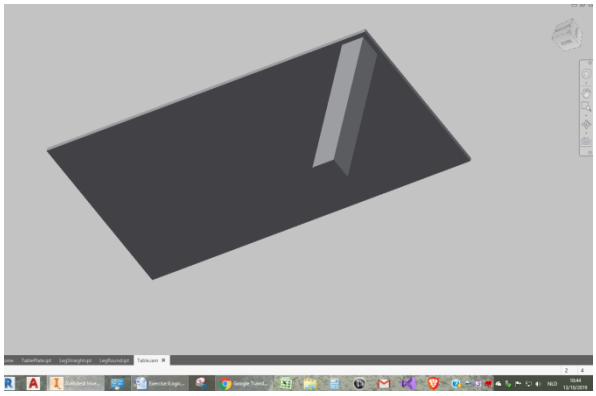
Change the posisions

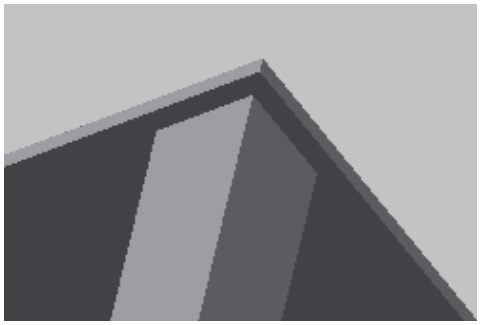


.

Next click

When you turn the table the leg should be positioned like this.





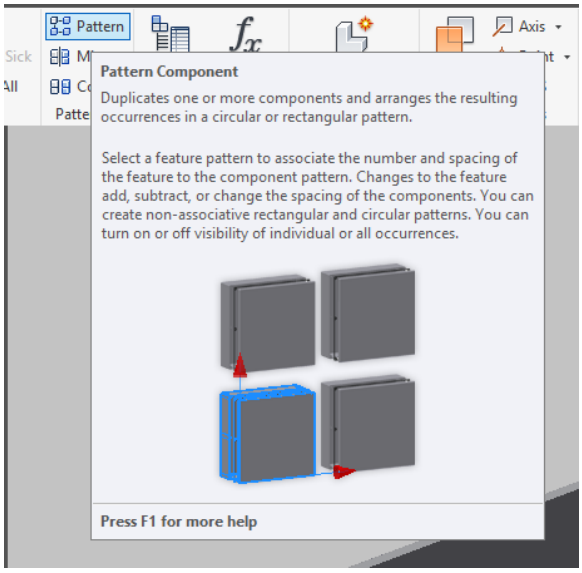
!!!!!Very importend!!!!!!

You must change the name from the legs in the explorer in the assembly.

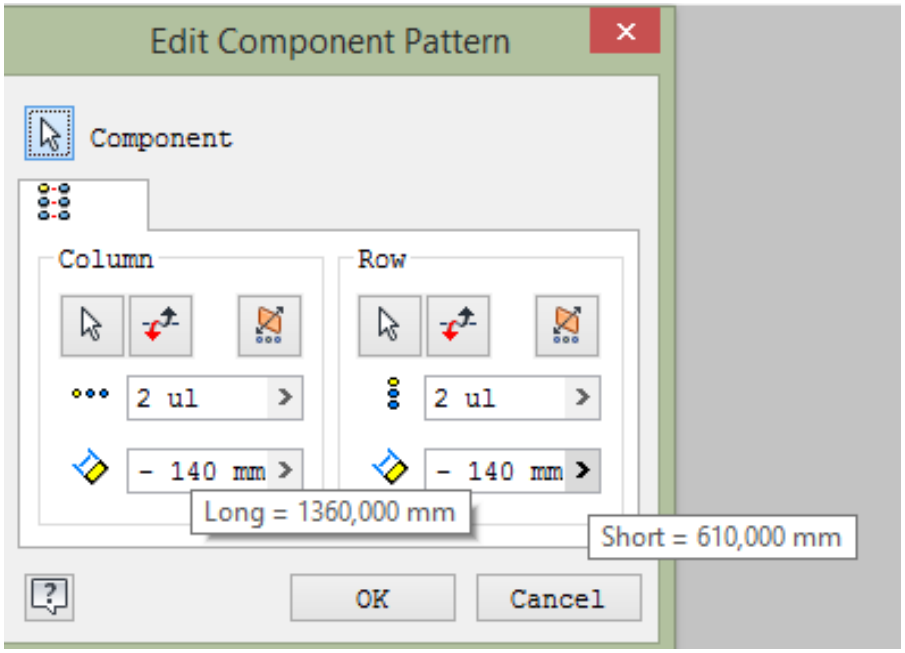
LegStraight : 1 must be “LegTable”

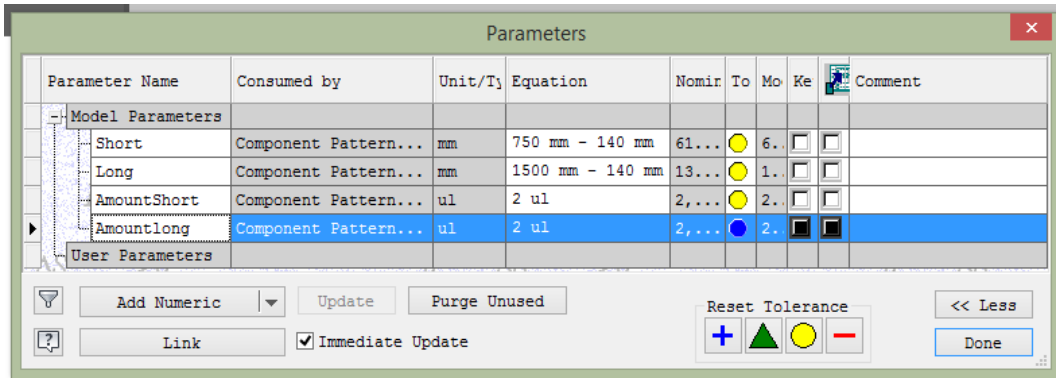
This is necessary to be able to create the rule in Ilogic in a simple way.

Next choose pattern component.



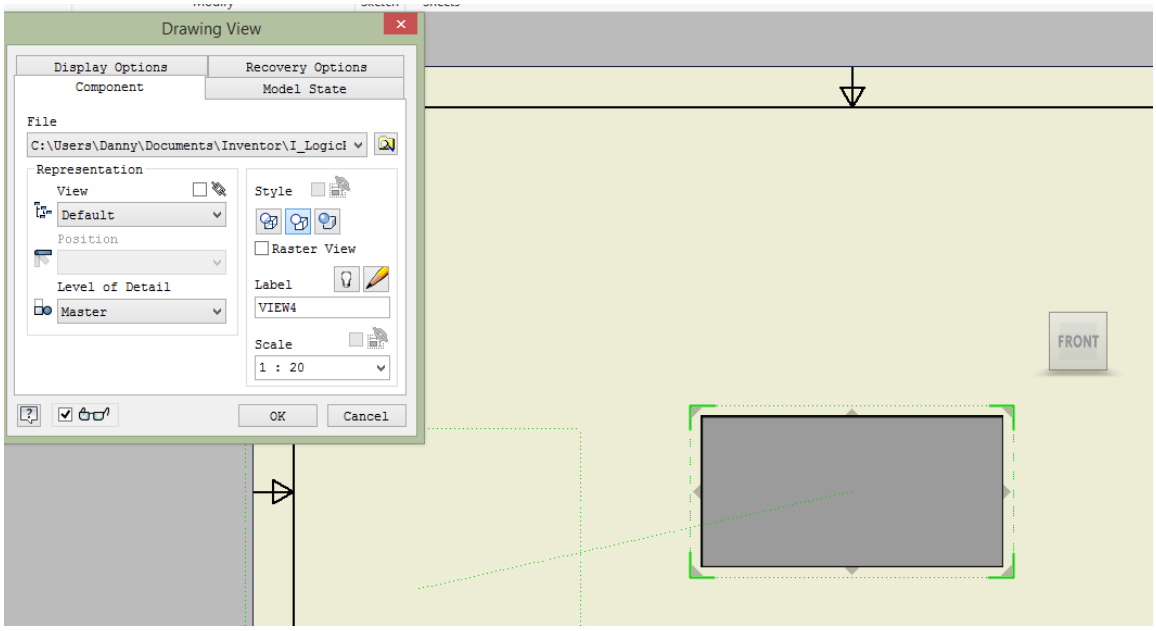
Long = 1500-140
Short = 750-140





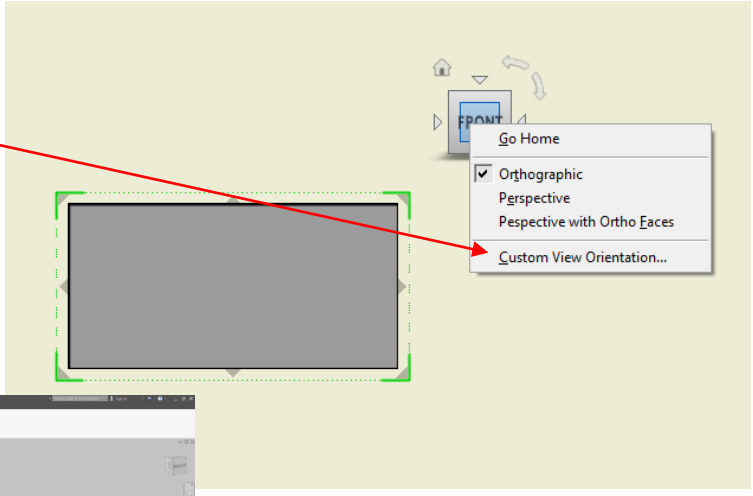
Preparation for drawing.

Open a new .idw
Format A4
Place a view.

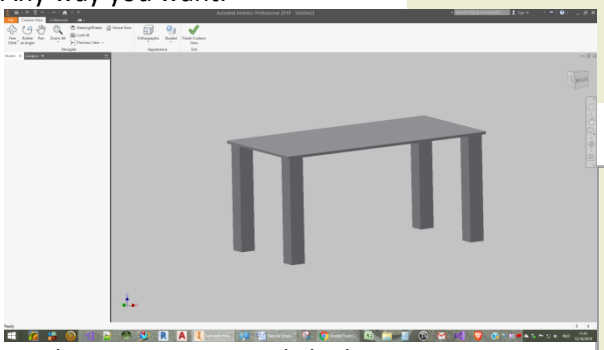


You can see that this is not the view that I want, so I adjust it.

Right click on the cube and
Then click on:
Custom View Orientation.

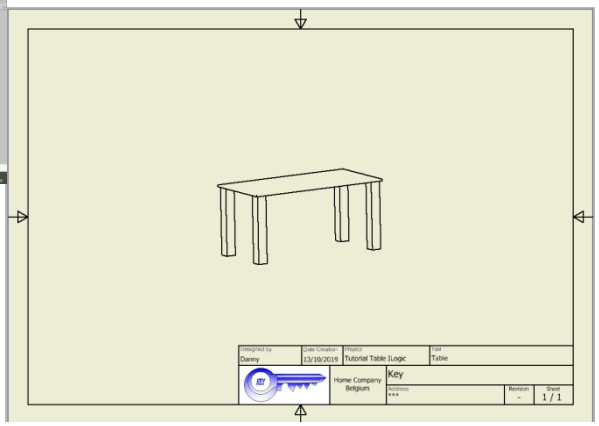


The view wil open and now
You can adjust it,
Any way you want.



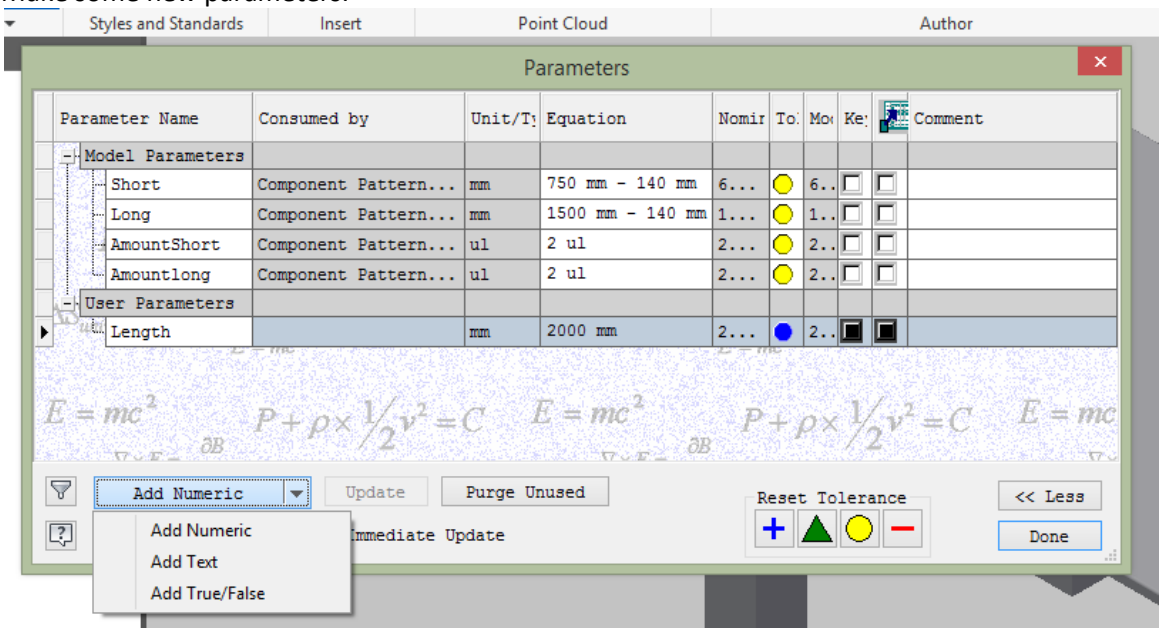
Finish custom view en click ok.

The drawing wil be like this.

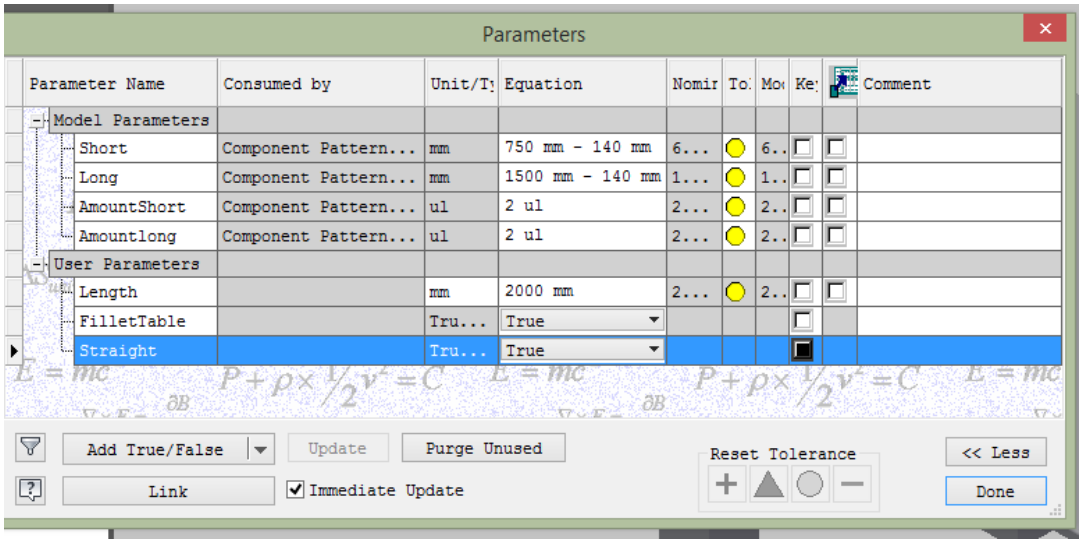


Forms. & ILogic

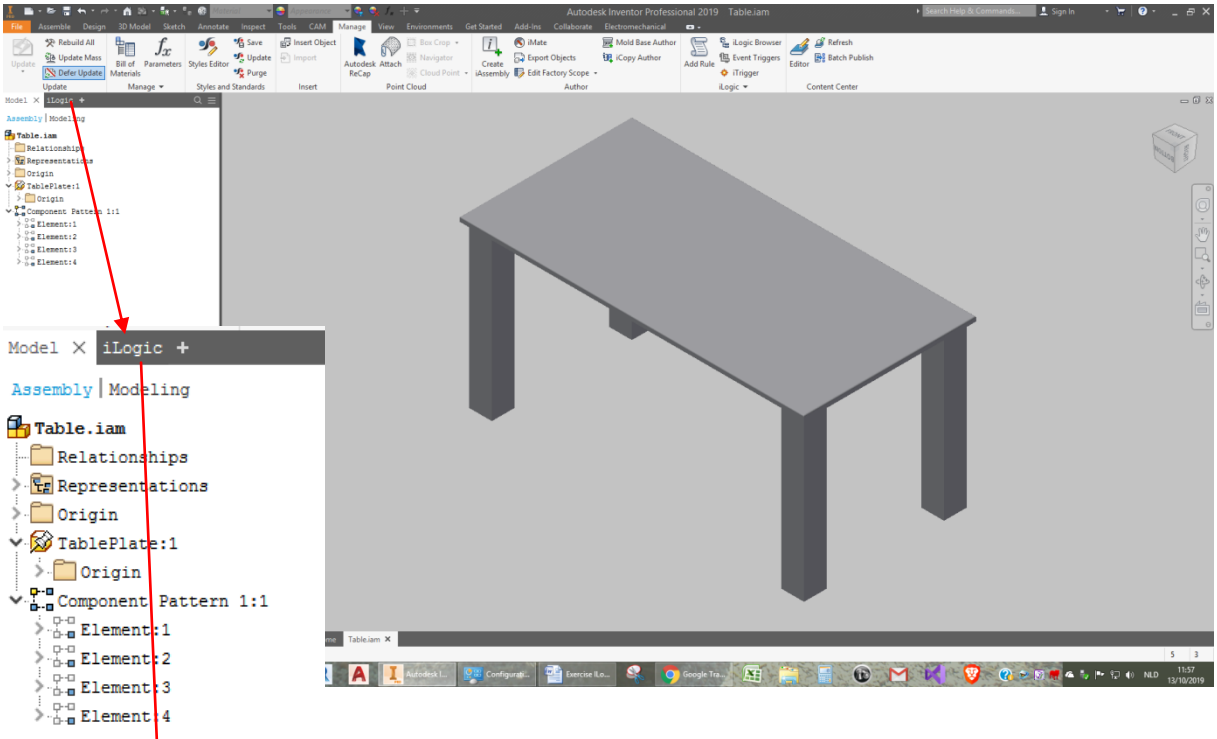
Parameters in a dialog box.
The First Ilogic Rule you make is in the assembly Table.
Open Table.iam
Go to parameters.
Make some new parameters.

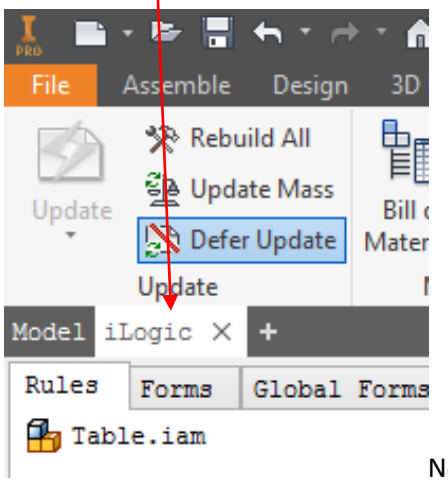


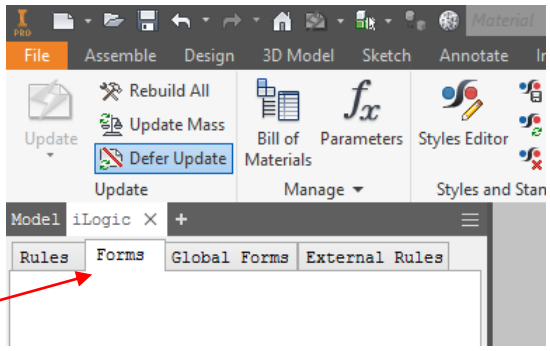
As you can see, click on Add Numeric and a list appears.
Now choose: Add True/False
So make it like the one below



Next choose in the explorer ILogic.

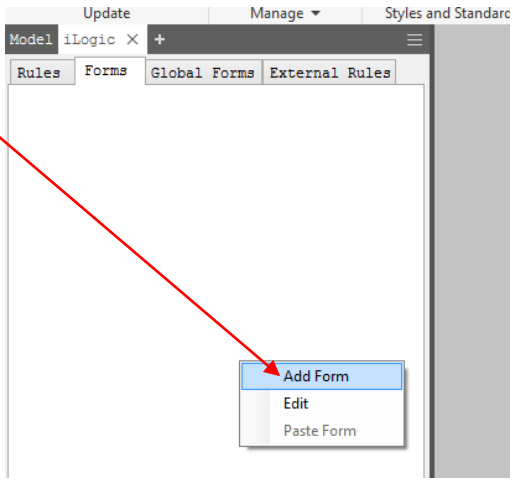




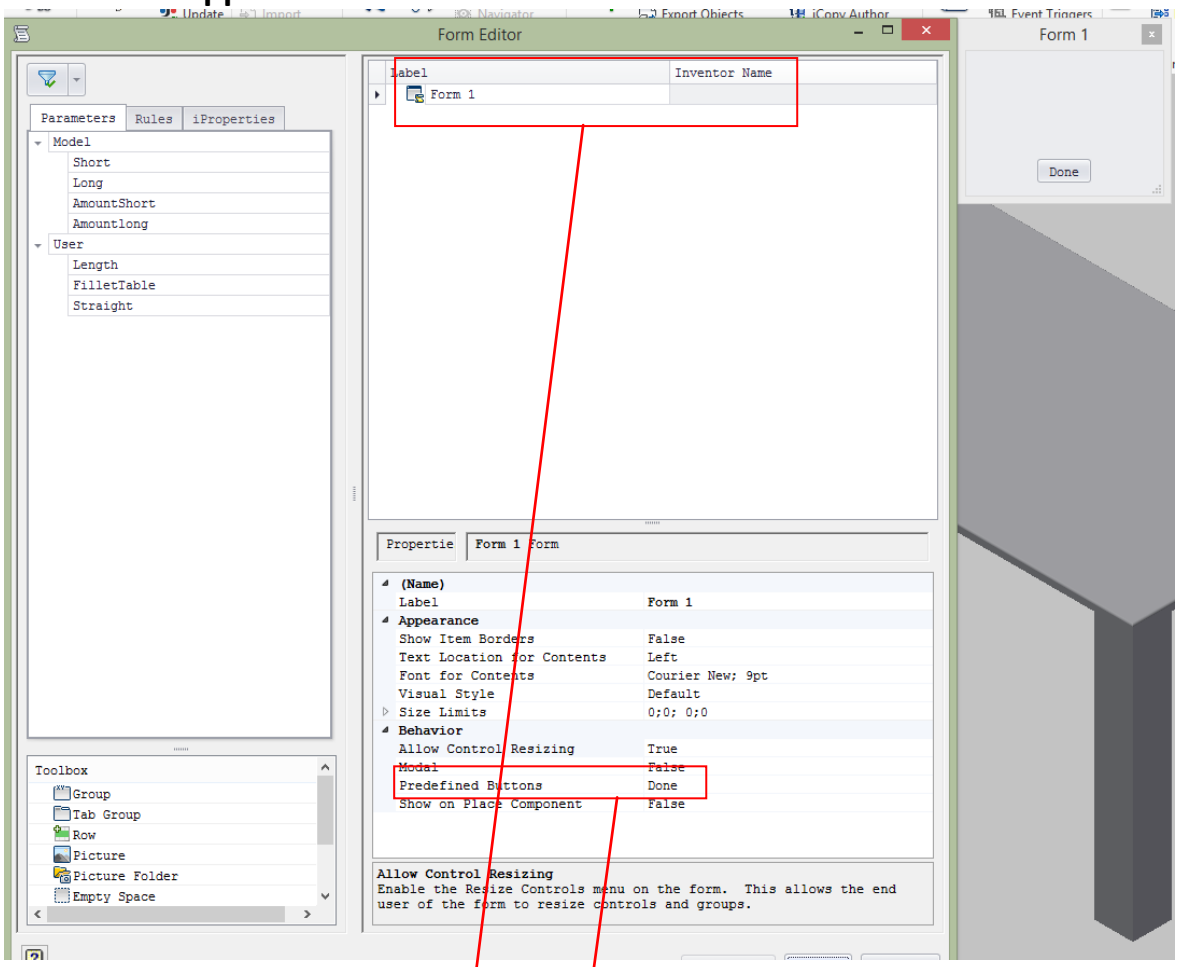


Next go to Forms.

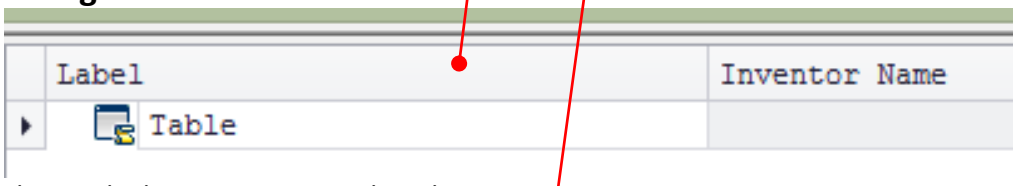
Now, Right click in de explorer and choose “Ad Form”



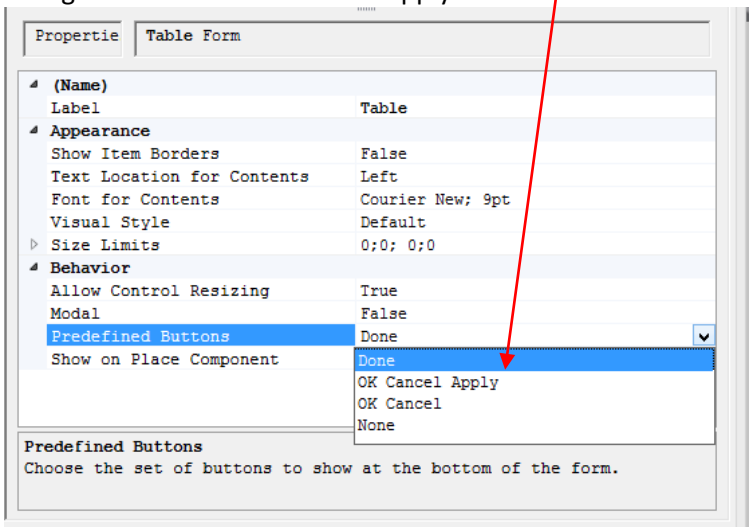
This should appear.



Change the name from the form in : Table

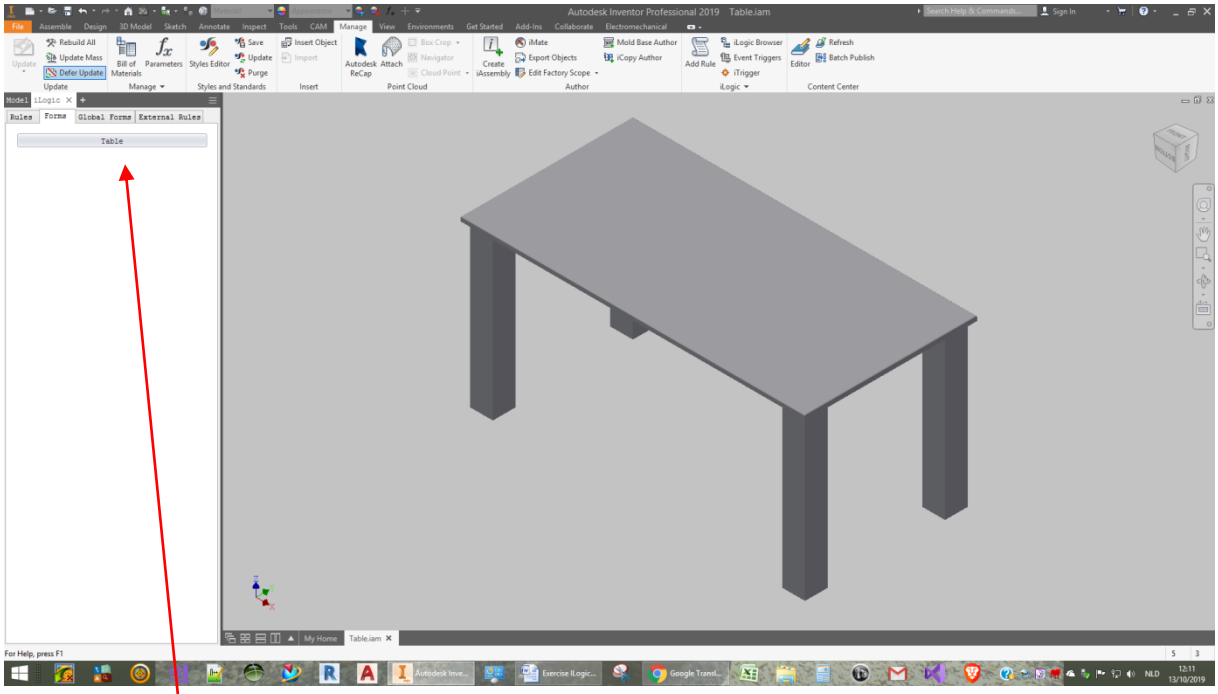


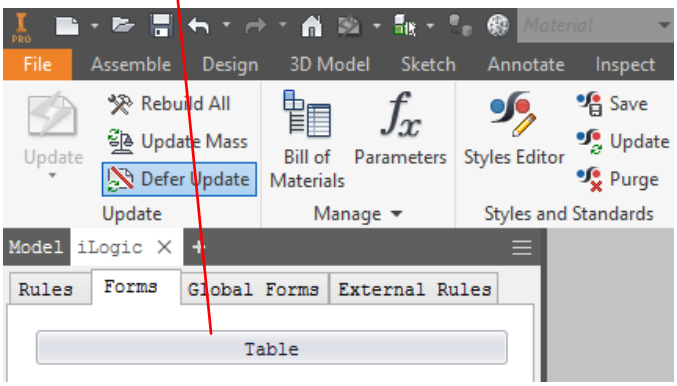
Change the buttons : OK Cancel Apply



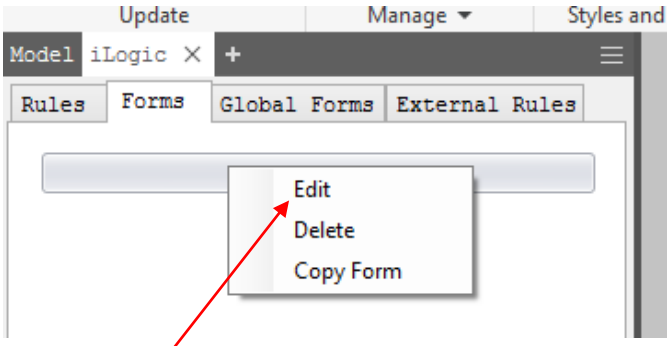
Next click OK.

Now you should see this.



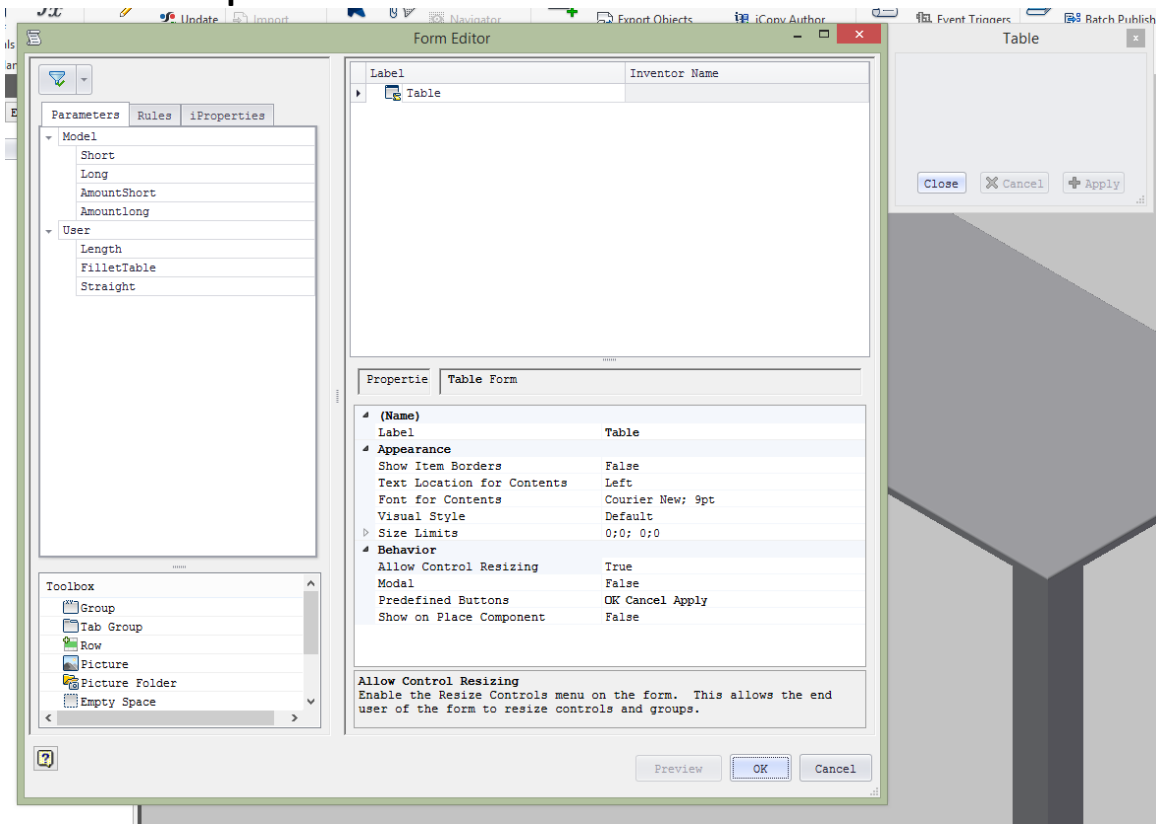


Do Right mous Click on Table.

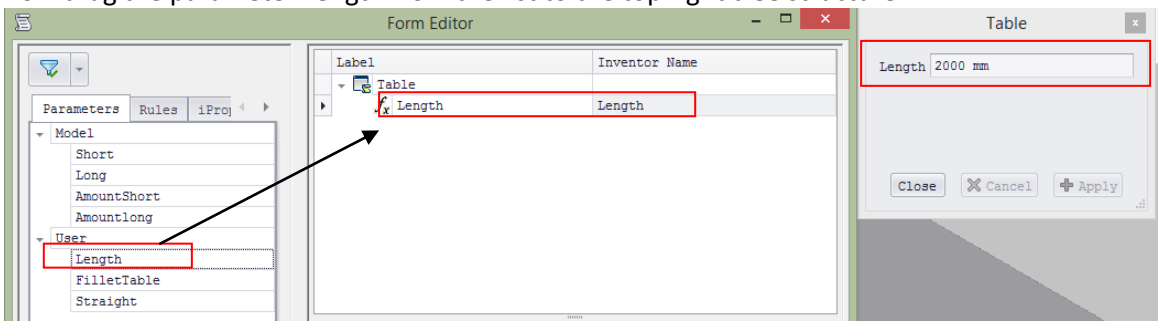


Next click “Edit”

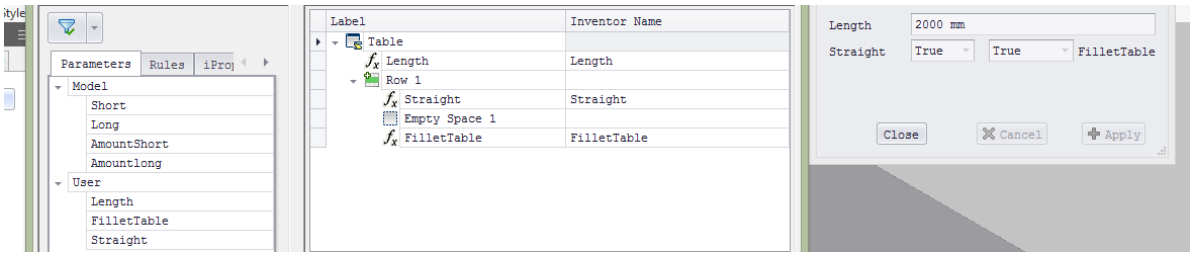
The form wil open in in edit mode.



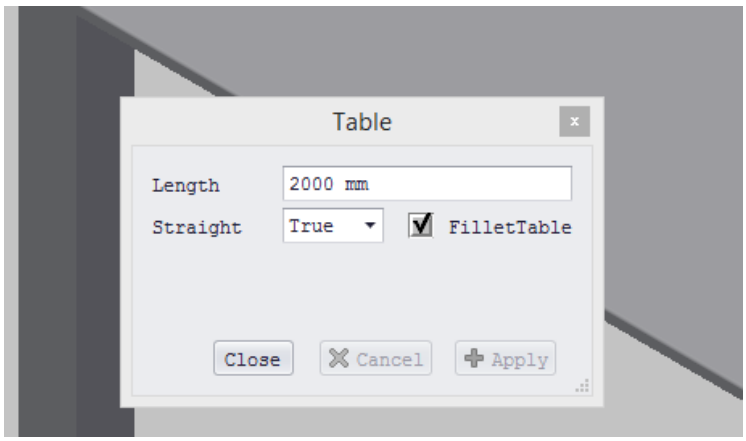
Now drag the parameter Length from the list to the top right tree structure.



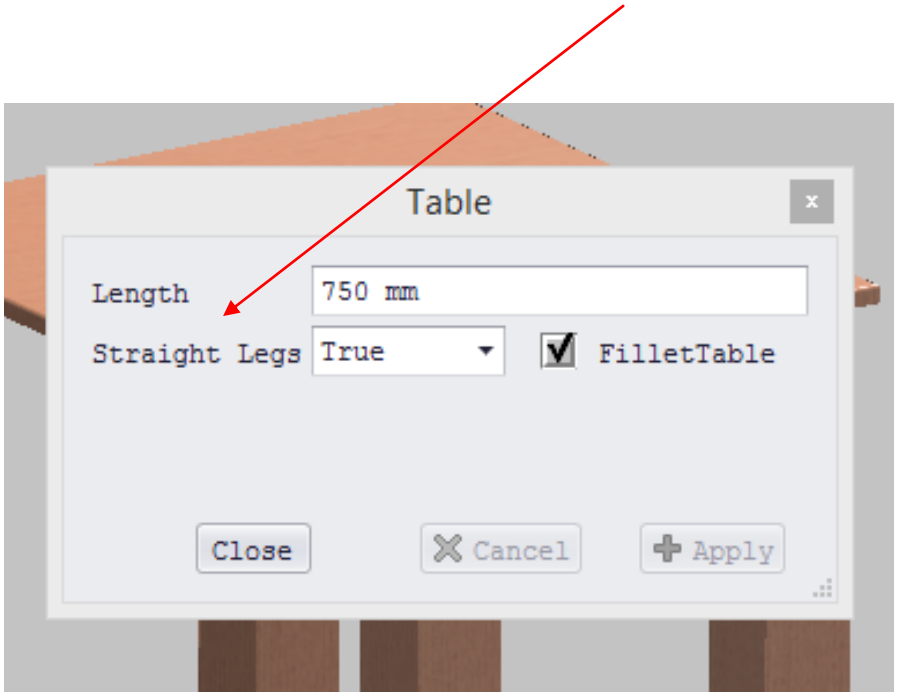
Now you can see that the parameter is inserted in the table form.
Next drag “Row” just below “Length”.
Do the same with :Straigth, Empty space and Fillettable.
Now a little bit of searching.
Choose for Emty Space “Minimum Witd” 10 pixels.
For Fillettable
Choose for “textLocation : Right
Choose for Control Type : CheckBox
So this is what you get.



If you click on the table this should appear.



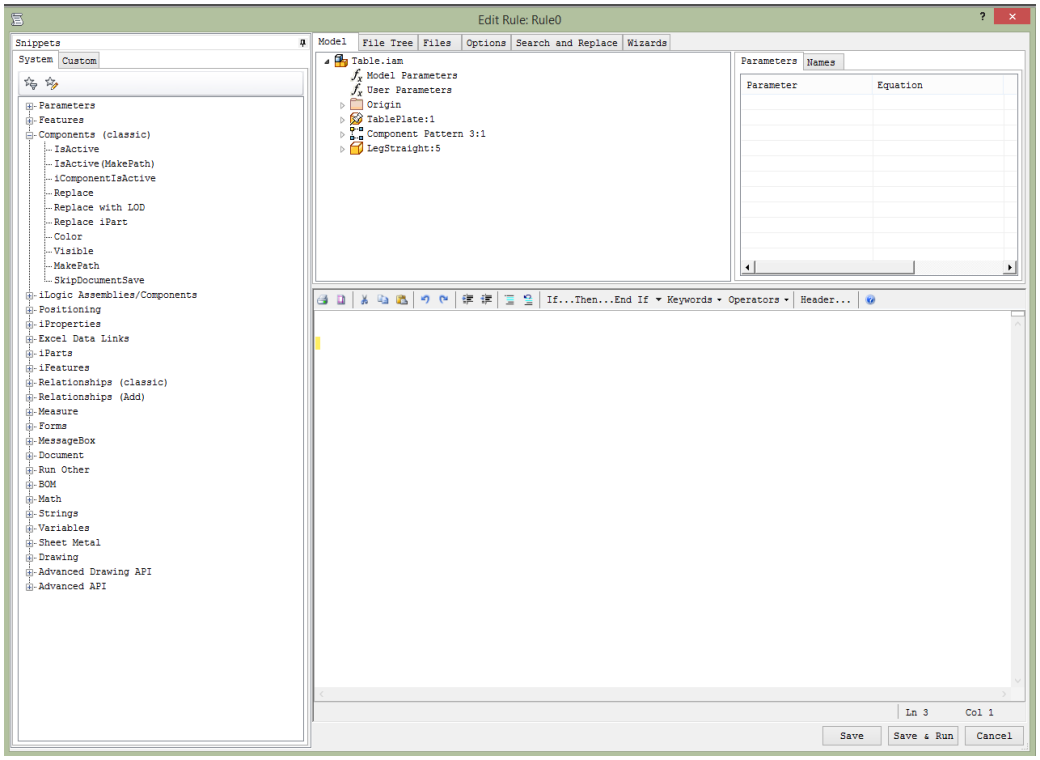
Now adjust the name Straight in the table to " Straight Legs "



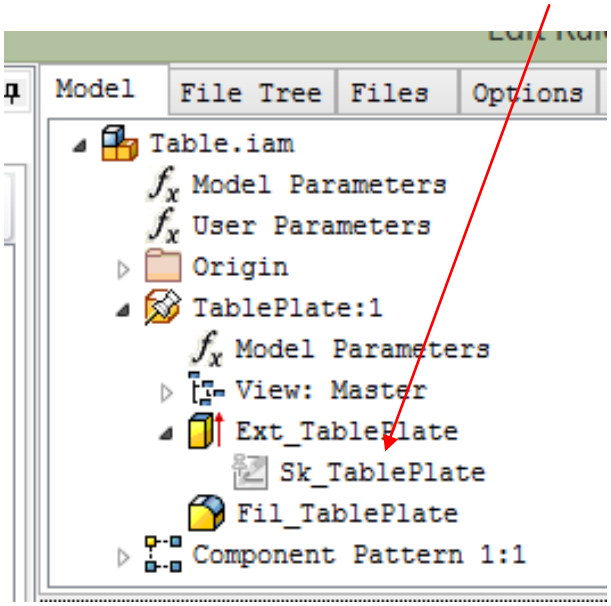
Now the real thing, simply starting makes it understandable.

Click in Ilogic explorer Tab Rules and then Right Click Add Rule.
I name the Rule : R_Table

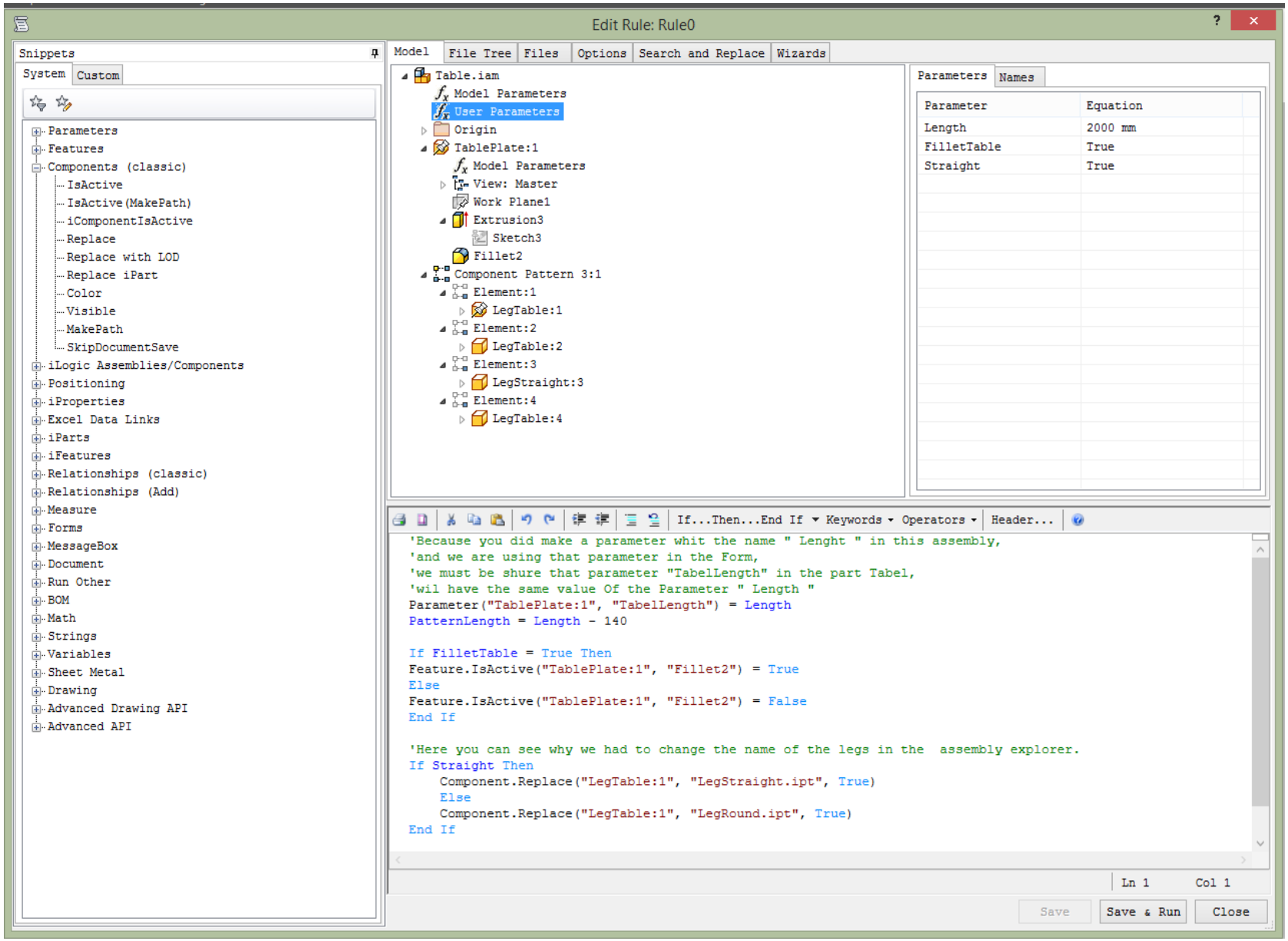
Now you must see somthing like this.



Open in the explorer from this Rule “sk_TablePlate”



Next double click on “parameter “ TableLength ”


Edit Rule: Rule0
Snippets
System
Custom
Parameters
Features
Components (classic)
IsActive
IsActive(MakePath)
iComponentIsActive
Replace
Replace with LOD
Replace iPart
Color
Visible
MakePath
SkipDocumentSave
iLogic Assemblies/Components
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Relationships (classic)
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Measure
Forms
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BOM
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Drawing
Advanced Drawing API
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Model Parameters
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TablePlate:1
Model Parameters
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Sketch3
Fillet2
Component Pattern 3:1
Element:1
LegTable:1
Element:2
LegTable:2
Element:3
LegStraight:3
Element:4
LegTable:4
Parameters
Names
Parameter
Equation
Length
2000 mm
FilletTable
True
Straight
True
If...Then...End If
Keywords
Operators
Header...
'Because you did make a parameter whit the name " Lenght " in this assembly,
'and we are using that parameter in the Form,
'we must be shure that parameter "TabelLength" in the part Tabel,
'wil have the same value Of the Parameter " Length "
Parameter("TablePlate:1", "TabelLength") = Length
PatternLength = Length - 140
If FilletTable = True Then
Feature.IsActive("TablePlate:1", "Fillet2") = True
Else
Feature.IsActive("TablePlate:1", "Fillet2") = False
End If
'Here you can see why we had to change the name of the legs in the assembly explorer.
If Straight Then
Component.Replace("LegTable:1", "LegStraight.ipt", True)
Else
Component.Replace("LegTable:1", "LegRound.ipt", True)
End If
Ln 1
Col 1
Save
Save & Run
Close

This is the code that must you need in the rule.

The green text is just comment.

```
'Because you did make a parameter whit the name " Lenght " in this assembly,
'and we are using that parameter in the Form,
'we must be shure that parameter "TabelLength" in the part Tabel,
'wil have the same value Of the Parameter " Length "
Parameter("TablePlate:1", "TabelLength") = Length
PatternLength = Length - 140

If FilletTable = True Then
Feature.IsActive("TablePlate:1", "Fillet2") = True
Else
Feature.IsActive("TablePlate:1", "Fillet2") = False
End If

'Here you can see why we had to change the name of the legs in the  assembly explorer.
If Straight Then
        Component.Replace("LegTable:1", "LegStraight.ipt", True)
        Else
        Component.Replace("LegTable:1", "LegRound.ipt", True)
End If
```

If you have done this without errors, you can use the form to adjust the table, square or round legs, rounding or not, and you can also determine the length.

This is a very simple example of ILogic, but it might encourage you to use ILogic.

Lots of fun.