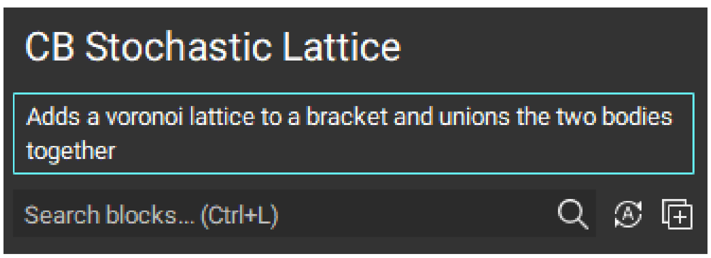
Follow Along: CB Stochastic Lattice

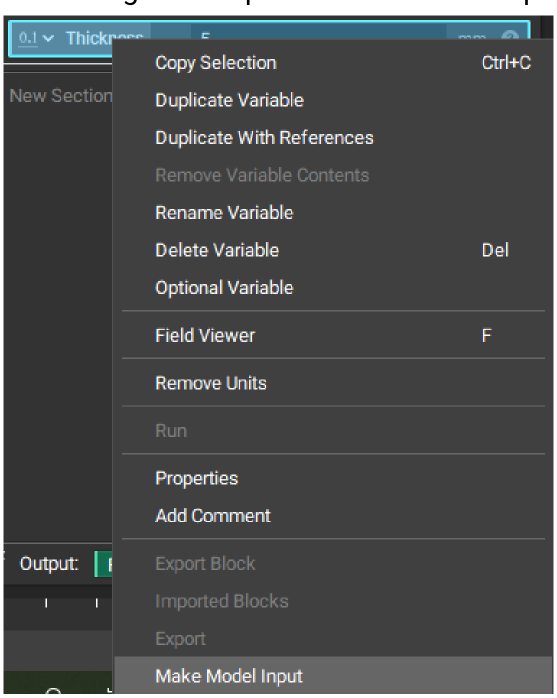
In this lesson, we will walk through creating a custom block from a stochastic lattice workflow and use this custom block in another workflow. To learn how this workflow was created, check out our lessons on Non-Periodic Lattices in the [210: Intro to Latticing Course](#).

Please download the nTop file below to follow along with the tutorial.

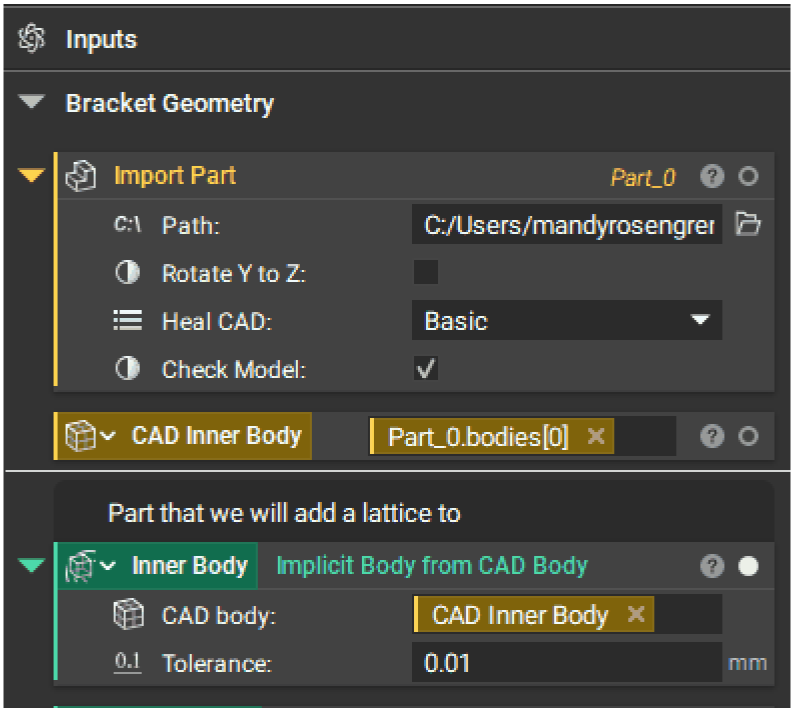
Step 1: First rename the Notebook to CB Stochastic Lattice by double clicking on the Notebook name. This will be the name of the custom block and be displayed when we eventually import this file into a new workflow. Update the description of the file with an overview of the stochastic lattice process. This was the description used in the video: "Adds a Voronoi lattice to a bracket and unions the two bodies together."

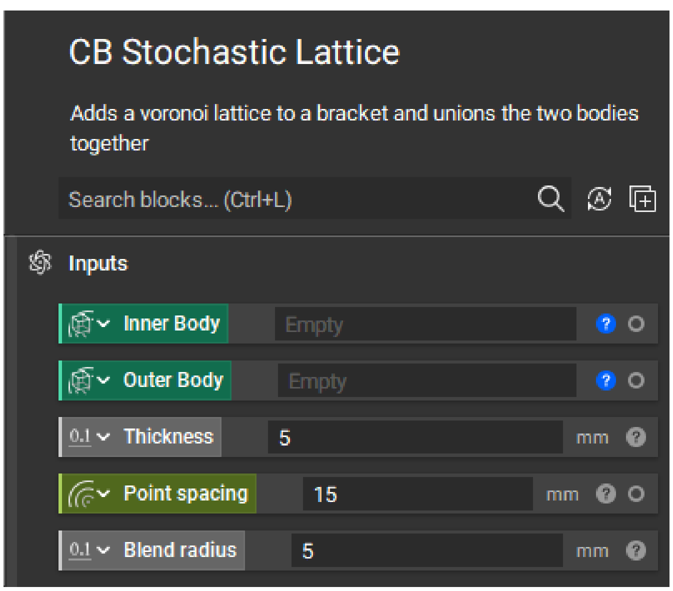


Step 2: To define our inputs, start with converting the inputs you want to change into variables by right clicking on the input and choosing Make Variable. To add the block to the inputs section either drag and drop the block into the input section or right click and choose Make Model Input.

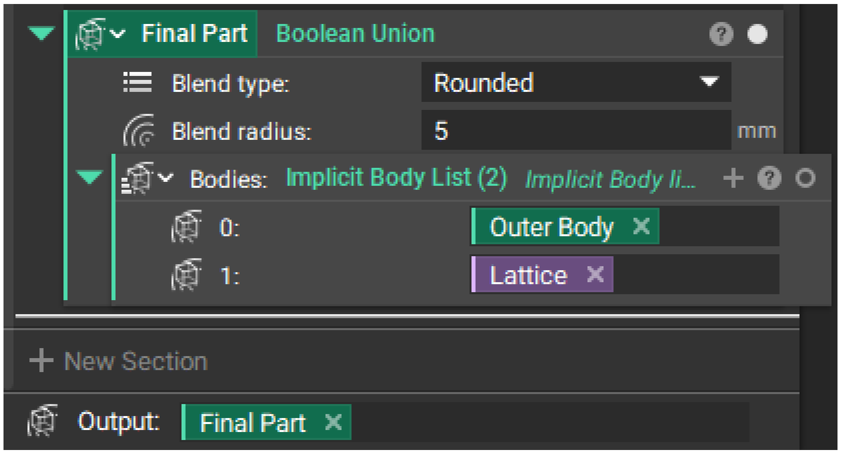


Step 3: Next, add the inputs you would like to change into the inputs section of the Notebook. We will use Inner Body, Outer Body, Thickness, Point Spacing and Blend Radius. Before placing the Inner Body and Outer Body variables into the Notebook, first remove the CAD body from that option.

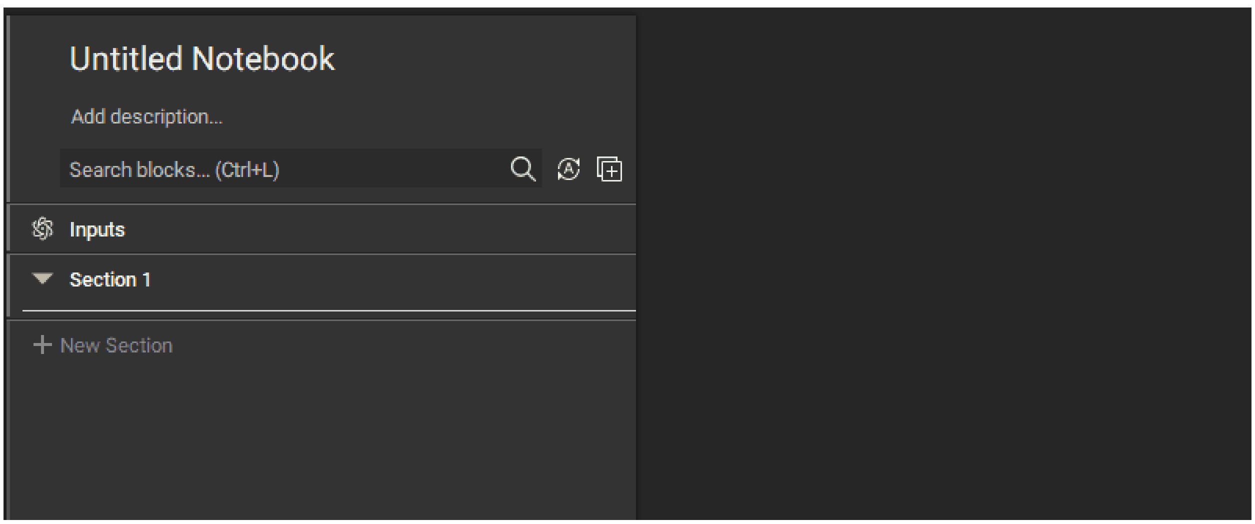




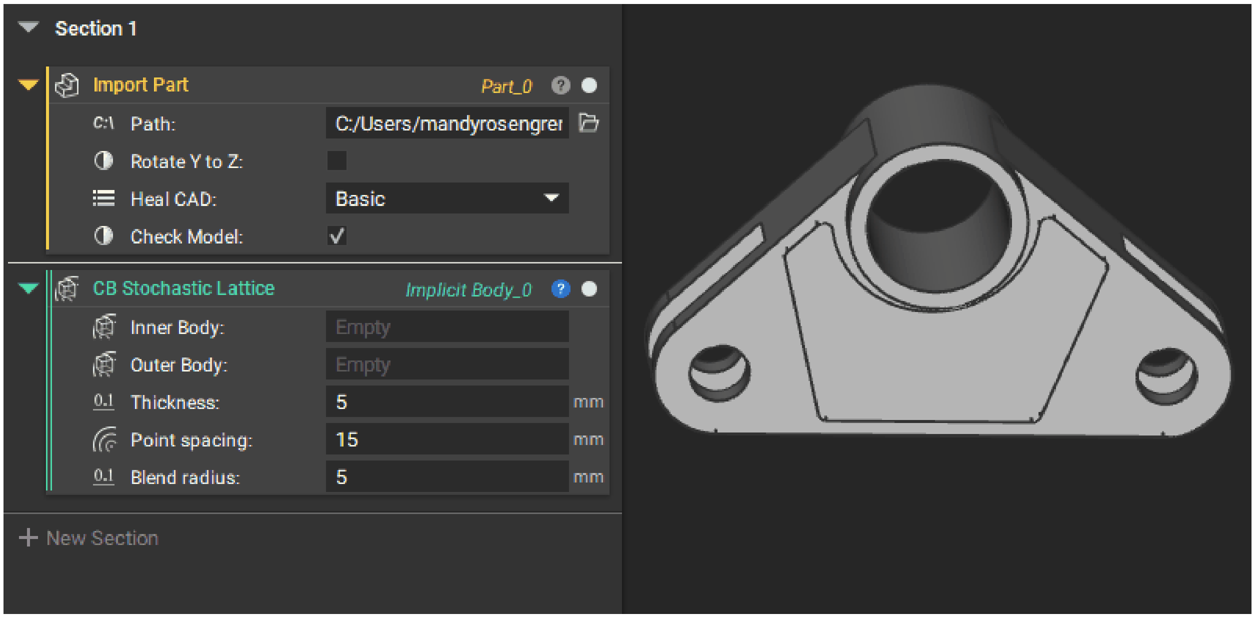
Step 4: Define the output by dragging and dropping the Final Part variable into the output variable.



Step 6: Once this file is complete, save this file again and open a new instance of nTop. We can input the custom block file by selecting the Imported Blocks icon in the Notebook header and clicking on "Import Block". Choose the CB Stochastic Lattice file, and as soon as it is imported, you will see that block in the Notebook.



Step 8: To test this custom block, import the file labeled 2part_smbracket.x_t. Create an implicit body variable for the inner body and outer body of this bracket and place those into the corresponding inputs in the custom block.


Section 1
Import Part
Part_0
Path:
C:/Users/mandyrosengrer
Rotate Y to Z:
Heal CAD:
Basic
Check Model:
CB Stochastic Lattice
Implicit Body_0
Inner Body:
Empty
Outer Body:
Empty
Thickness:
5
mm
Point spacing:
15
mm
Blend radius:
5
mm
New Section