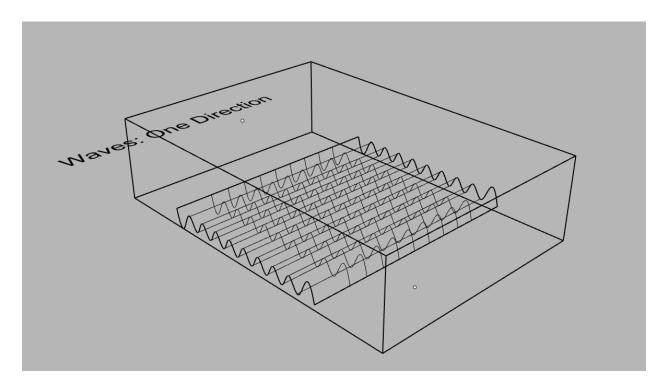
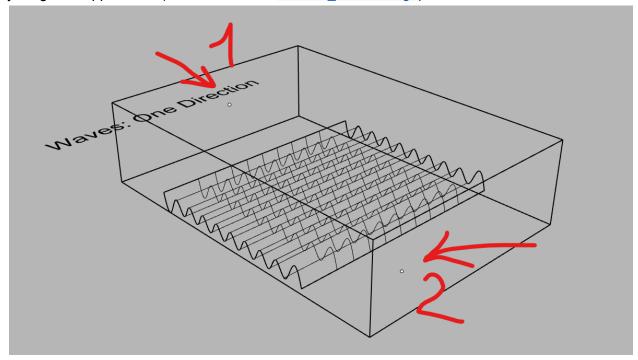
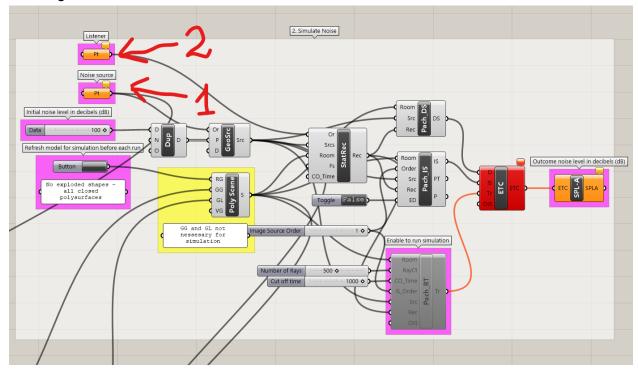
Testing the noise level in boxes:



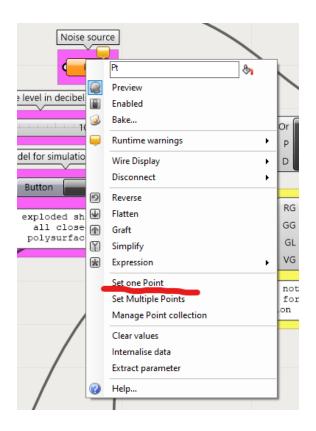
To test the noise level in the box you have to plug in the noise source(the point number 1) to your grasshopper code (the file is named acoustic_simulation.gh)



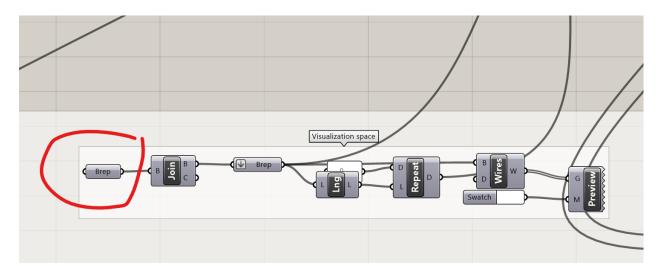
Open the grasshopper file and start plugging the geometry. To plug the point click on the node with a right mouse button on the noise source or listener

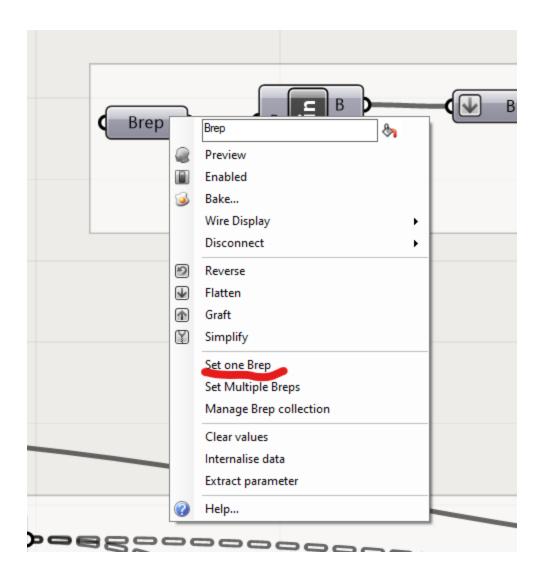


You will see the menu where you should choose the option "Set one point" after clicking on it the grasshopper window will disappear automatically and you can simply click on the point in Rhino, representing the noise source or listener (the point representing the listener is located lower).



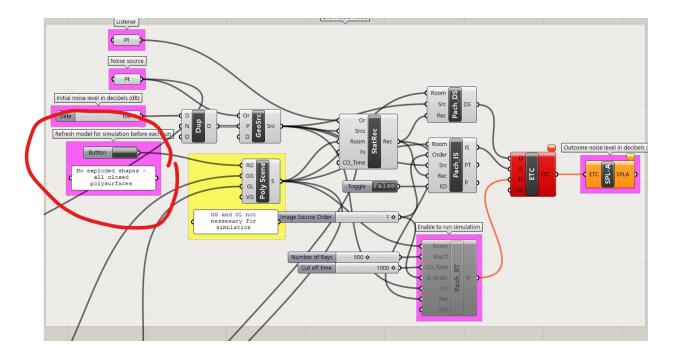
To connect the box you have to plug it as a "Brep" in this part of code:



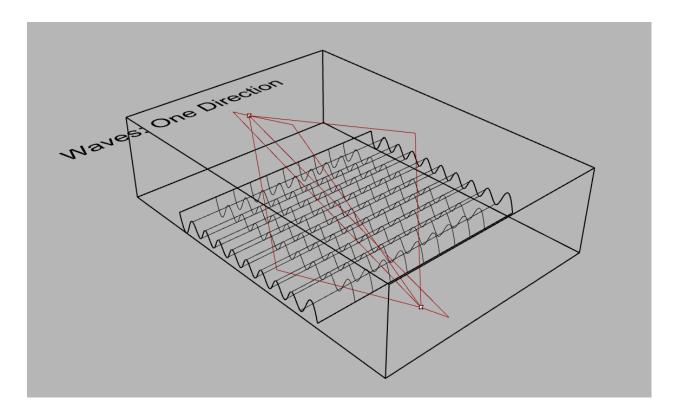


And, as with points just choose the correct box in the Rhino

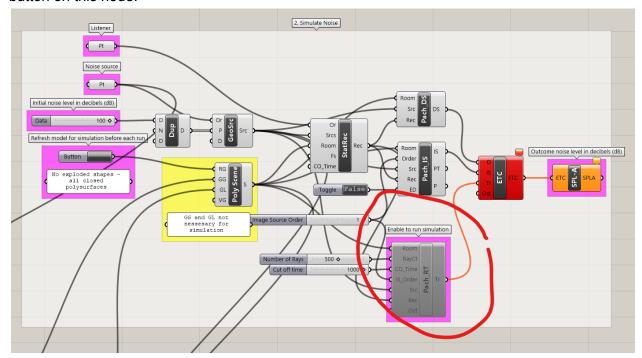
After connecting both points and the box to the nodes you should click on the "refreshing button"



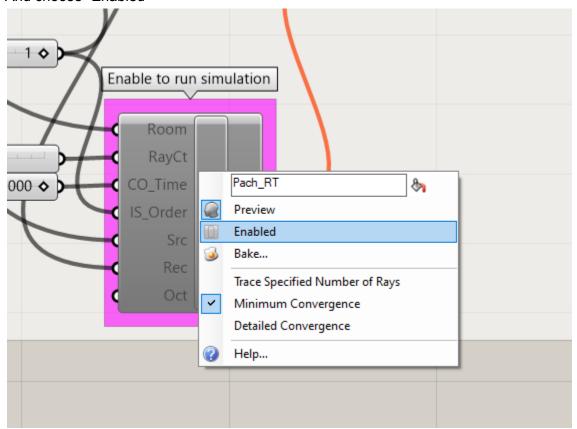
To check that everything is correctly plugged in - see if your two points are connected with red wire.



Ather checking it you can start the simulation. To do that you have to click with a right mouse button on this node.

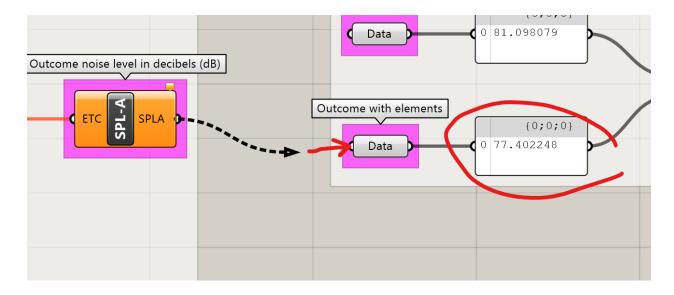


And choose "Enabled"



Ather that the noise simulation will start. It might take several minutes, depending on your computer computational abilities and the size of the file.

After the simulation is finished you will be able to see the result here. Just connect these two nodes with a wire.



Write down the results in the excel/google sheets and move to the next box.

After checking all of them, compare the results and draw conclusions. What works best in terms of noise mitigation?

<u>For the environment group</u> — change the dimensions of the box with a "Grass ground" and see what will change. How does the size of the box influence the noise level detacted – how can it be connected to the real world?

<u>For the geometry group</u> – what geometry was the best performing one? Are there any correlations that you see? Create your own geometry to improve the performance and test it.