Assignment 6

063-0610-00L The Digital in Architecture

Spring Semester 2020

Gramazio Kohler Research, ETH Zürich

Due: Mo, 6.04.2020 23:59

Task 1

Create a brick wall with **n** points per layer (along global X-direction) and **m** layers (along Z-direction).

Lower left-hand corner (point) should be at {-1, 2, 0}.

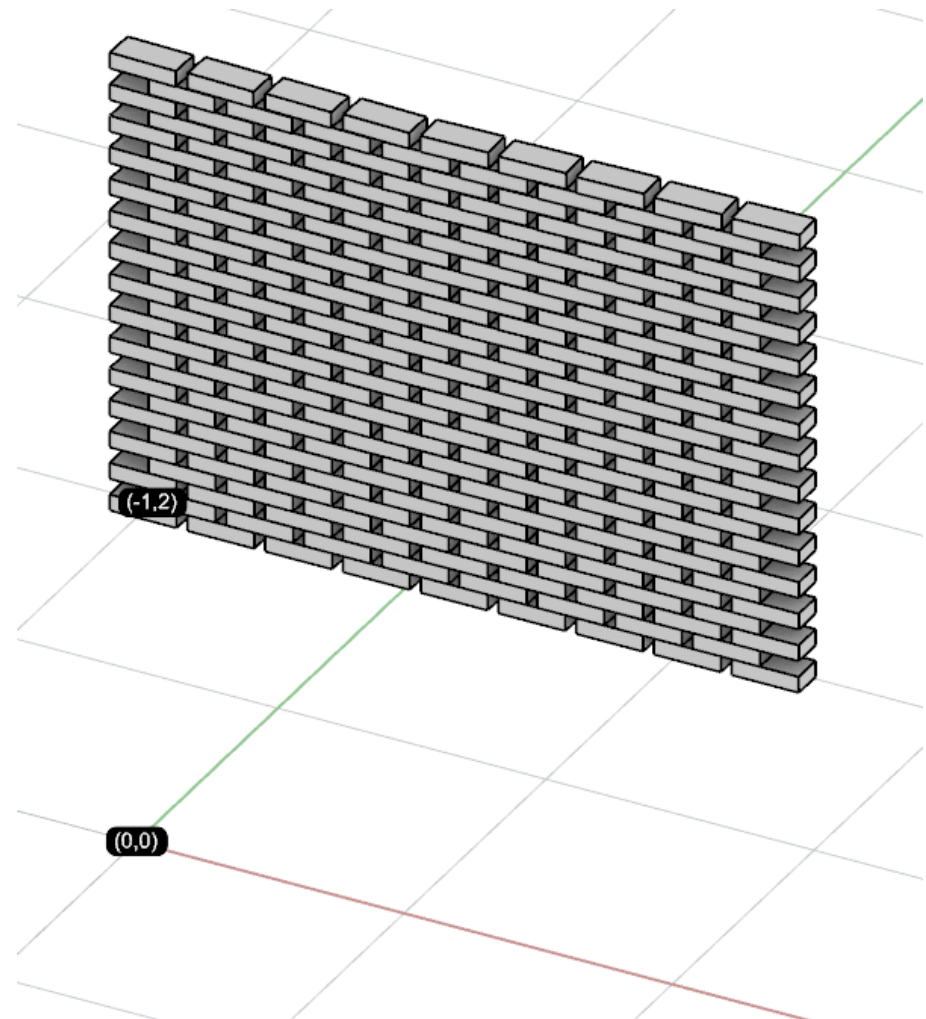Use:

*N points per layer: **17***
*M Layers: **29***
*Distance between points: **0.145 cm***
*Distance between layers: **0.06 cm***

*Brick length: **0.25 cm***
*Brick width: **0.12 cm***
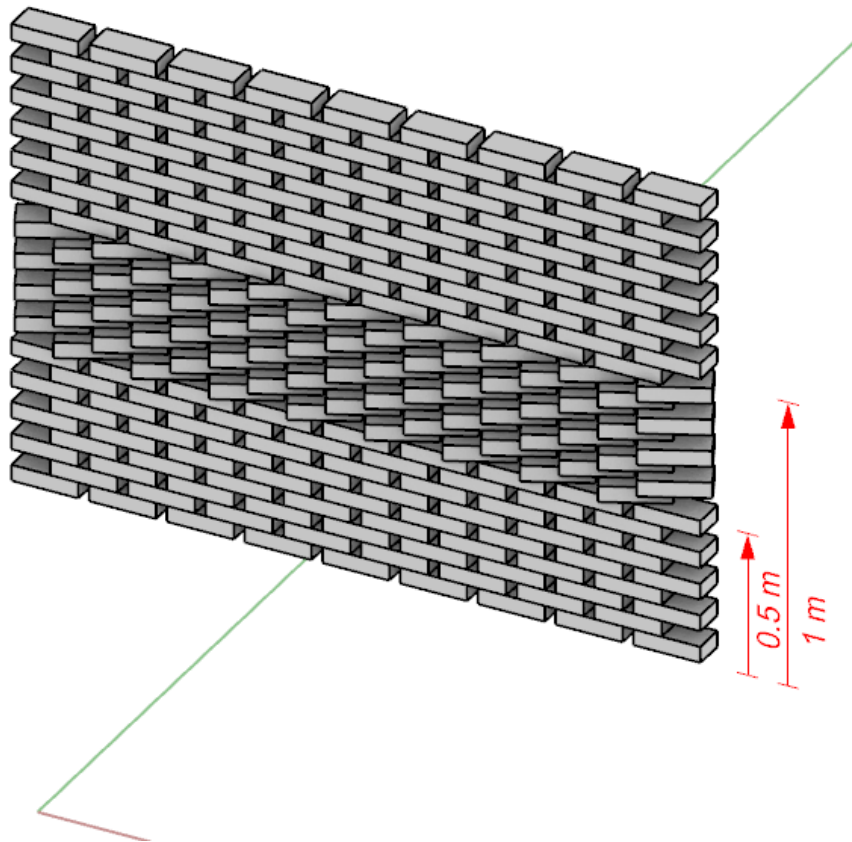*Brick height: **0.06 cm***

Task 2

Rotate the bricks along its Z-Axis that are in between 0.5 and 1 m height.

Use components:

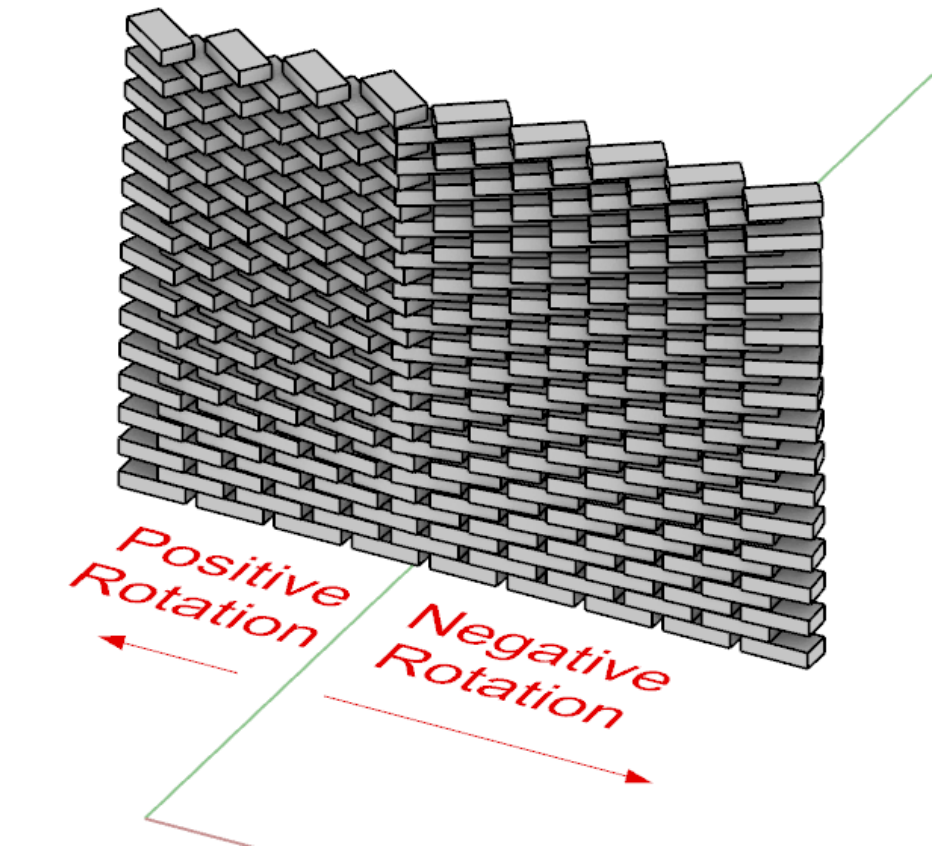> *(Math > Operators > Smaller than)*
>
> *(Math > Operators > Larger than)*
>
> *(Math > Operators > Equality)*

Task 3 (bonus)

Make the rotation direction dependant on the sign of the x-coordinate and z-coordinate. Observe: in Task 1, your design was placed from the negative to the positive range of x-coordinates.

To submit:

- A **.pdf** file with 3 pages. Each of the page will contain a different Task. Rename your pdf file to include your surname and name: (Assignment4_Mustermann_Chris.pdf)

  To create the screenshots of your design, follow this settings:
    - In Grasshopper: **Bake** your geometry.
    - In Rhino: use Artic and Parallel view and change the **background to white with no Grid.**
      Use ViewCaptureToFile command to make the screenshot, set width=3000 and height=1500. Use white Background and Save as *.png.

- a Grasshopper file (*.gh) with your modified code – **the code for each task must be grouped and labeled**. Rename your file to include your surname and name. (Assignment4_Mustermann_Chris.GH)

IMPORTANT

Do not submit the Rhino (*.3dm) file.
Do not submit multiple copies
Do not submit .zip files
Stricktly stick to the file-naming convention!