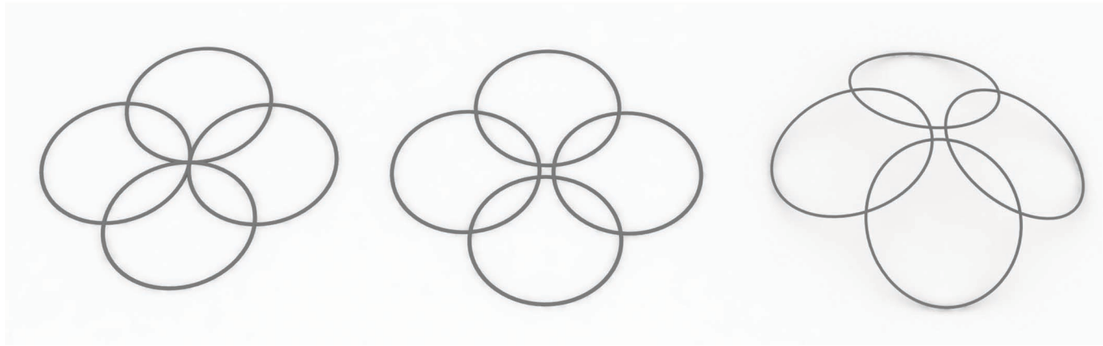
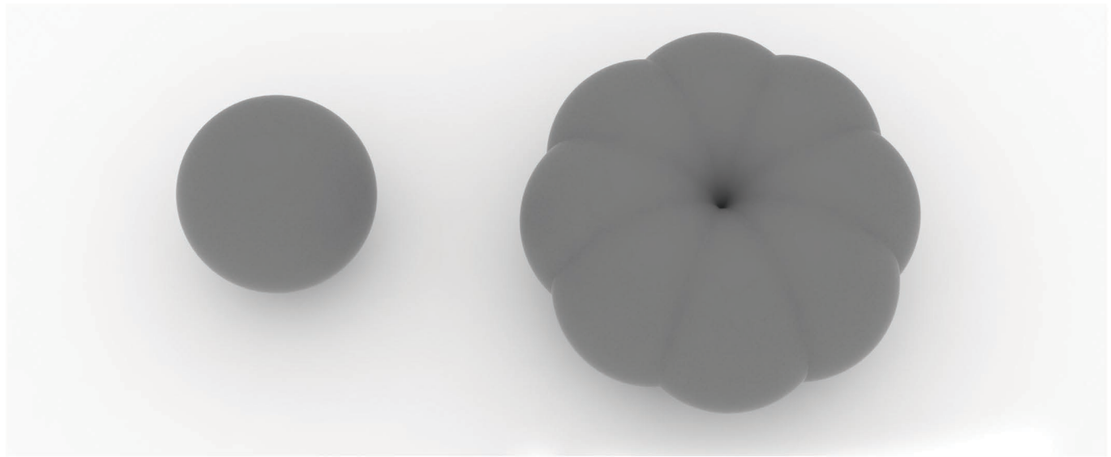
Script Diagram

Script inputs:
- Ribs iterations
- Radius of element
- Vault fragmentation
- Offset between vertical ribs
- Elements' extrusion

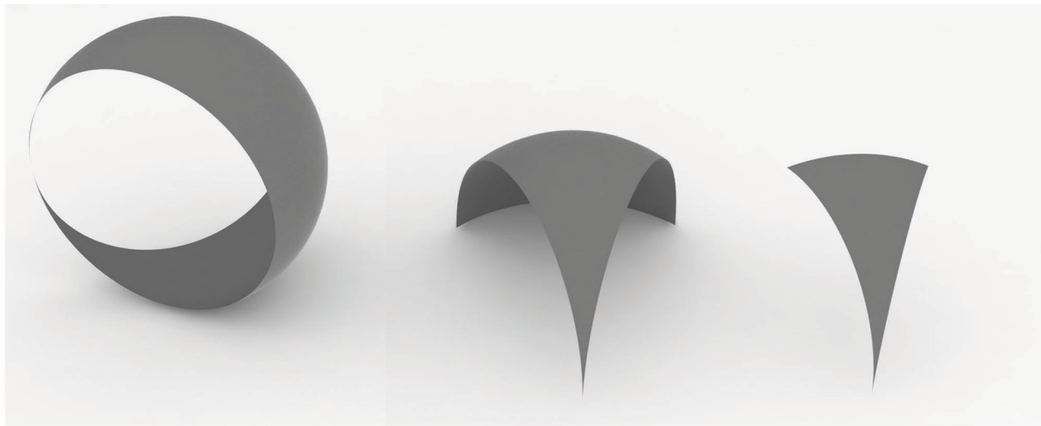
1. Basic geometry
the geometry of the ribbed structure. It is also the logic behind arrangement of spheres (for vault construction).



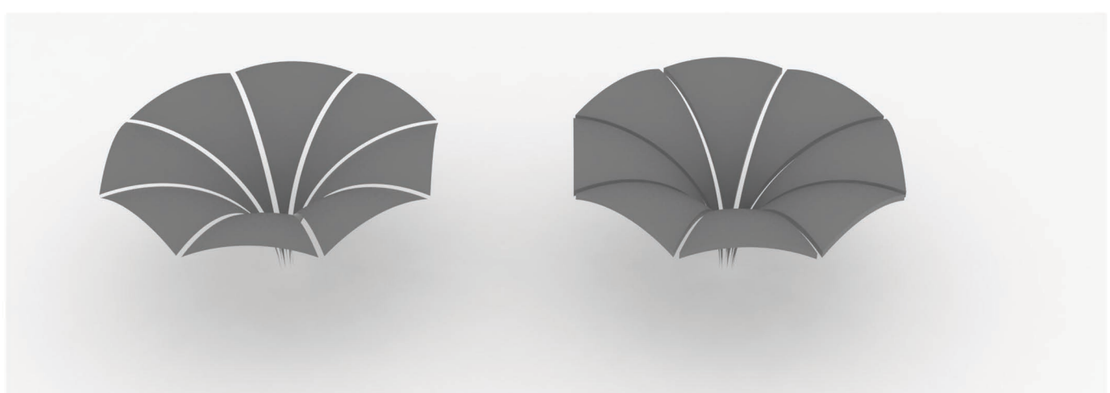
2. Spheres creation
Creation of spheres following the logic identical to this of circles/ribs. The sphere is rotate around a certain point with given offset



3. Spheres intersections
A single sphere is being intersected with all the other spheres. The resulting module is then trimmed twice (with predefined trimming boxes). The following are the results of the trimming.



4. Vault from module
After extracting a single intersection module, this vault element is repeated a certain number of times to form a vault. The vault can then be given thickness. The gaps between the elements are parametrically defined in the script.



5. Ribs creation
Using curve extraction, the ribs are created in stead of solid elements. Going back to 'point 1'- the ribs in between: the parametric circular pattern is layed over the vault elements.