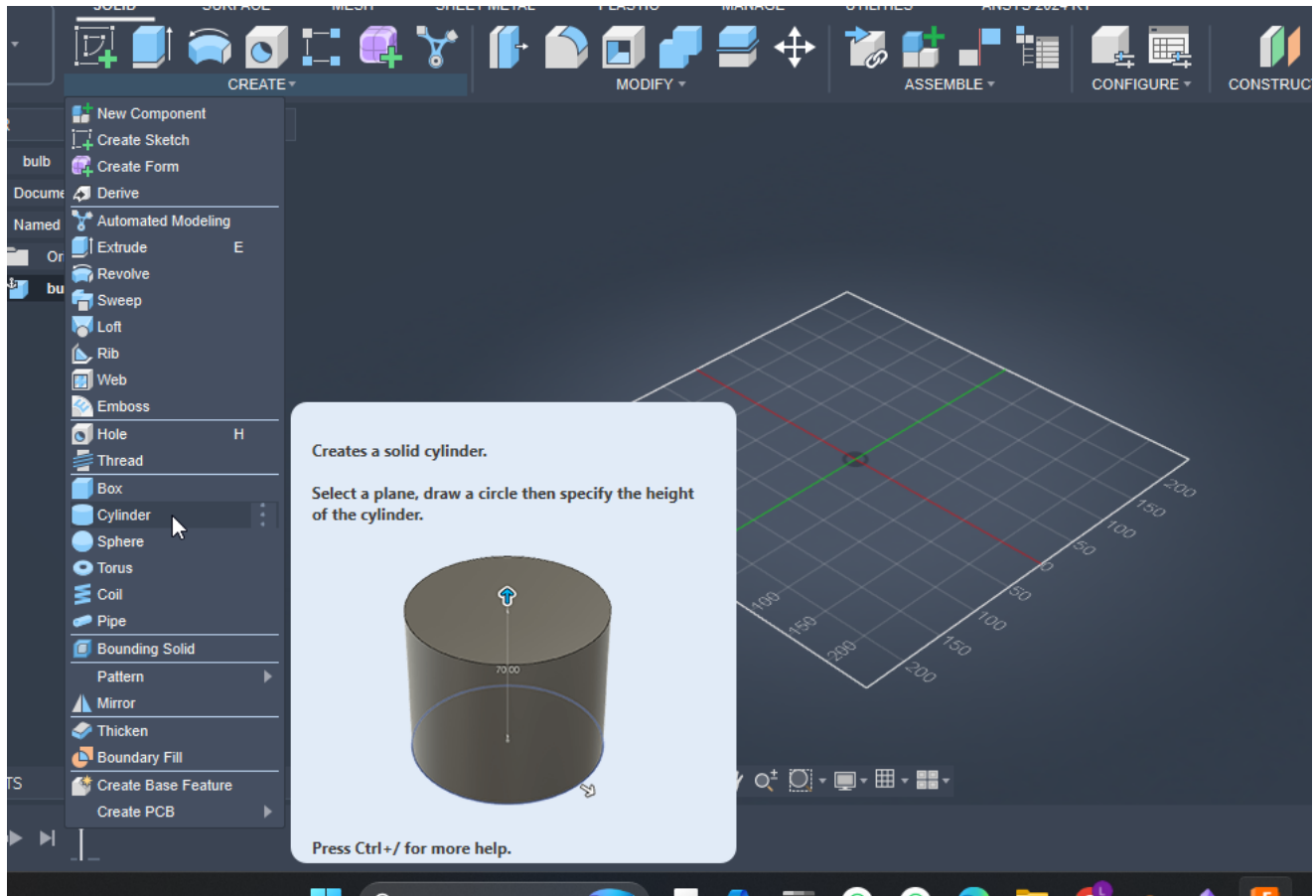
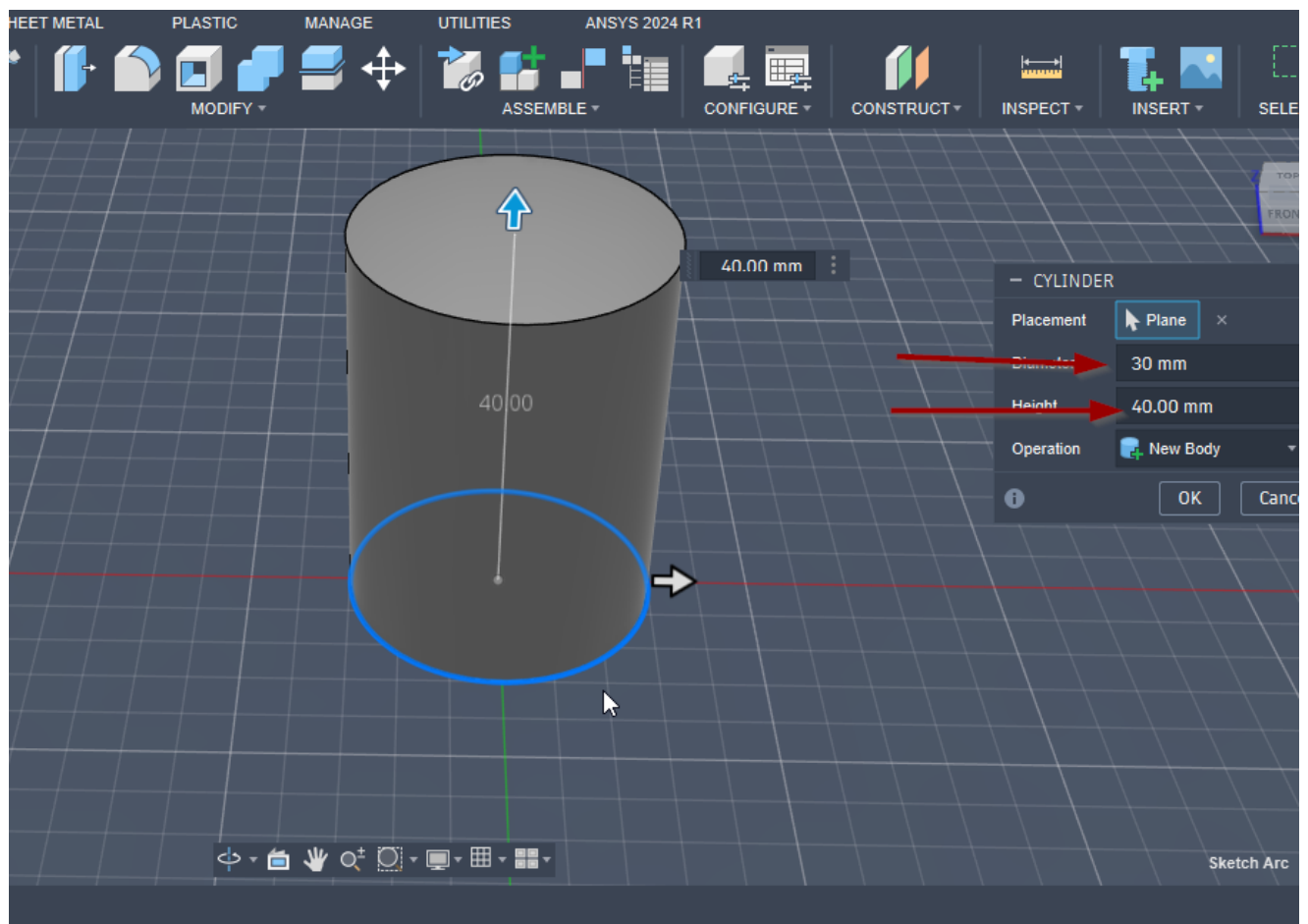


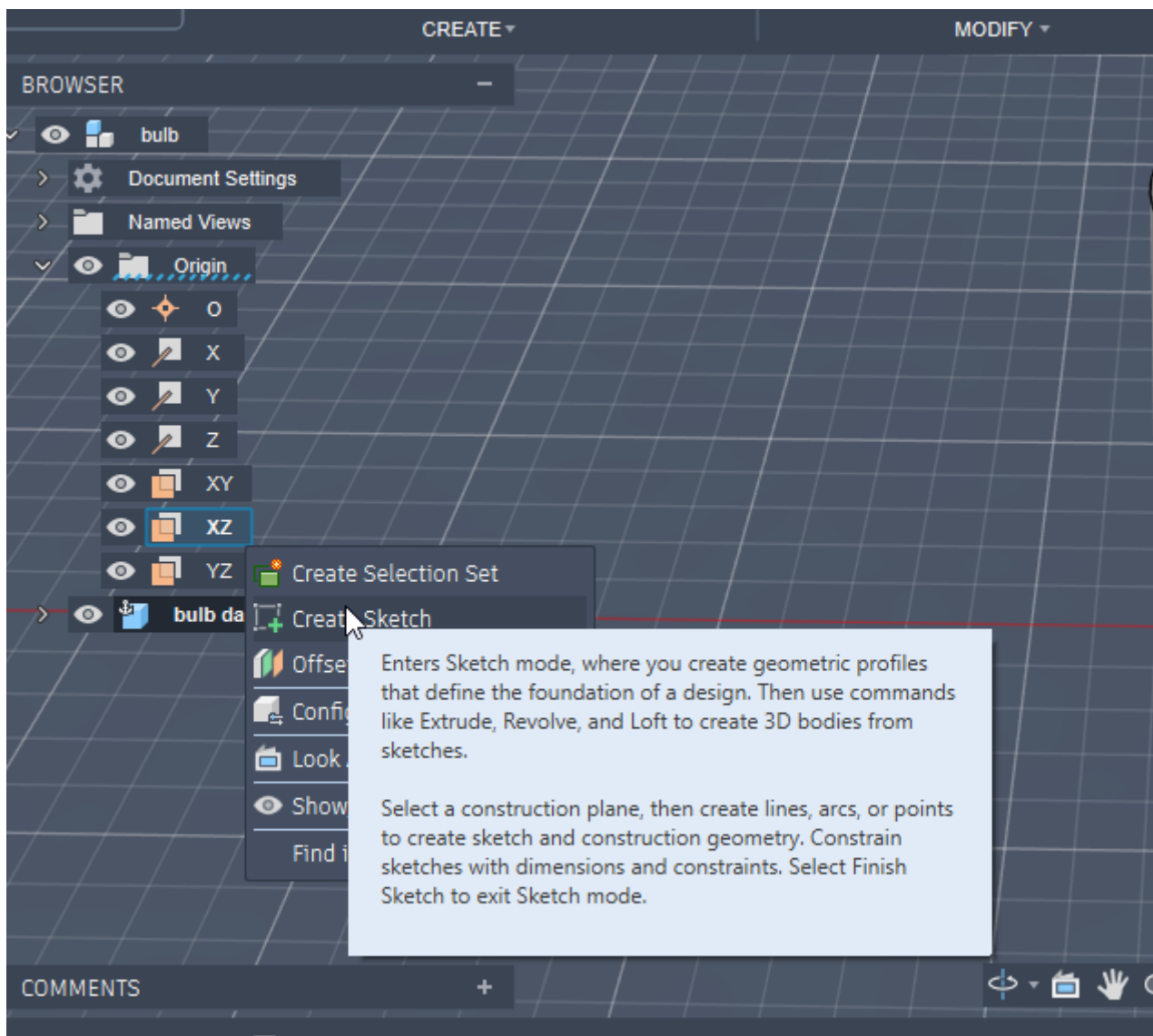
LED Light Bulb



Select Cylinder primitive.

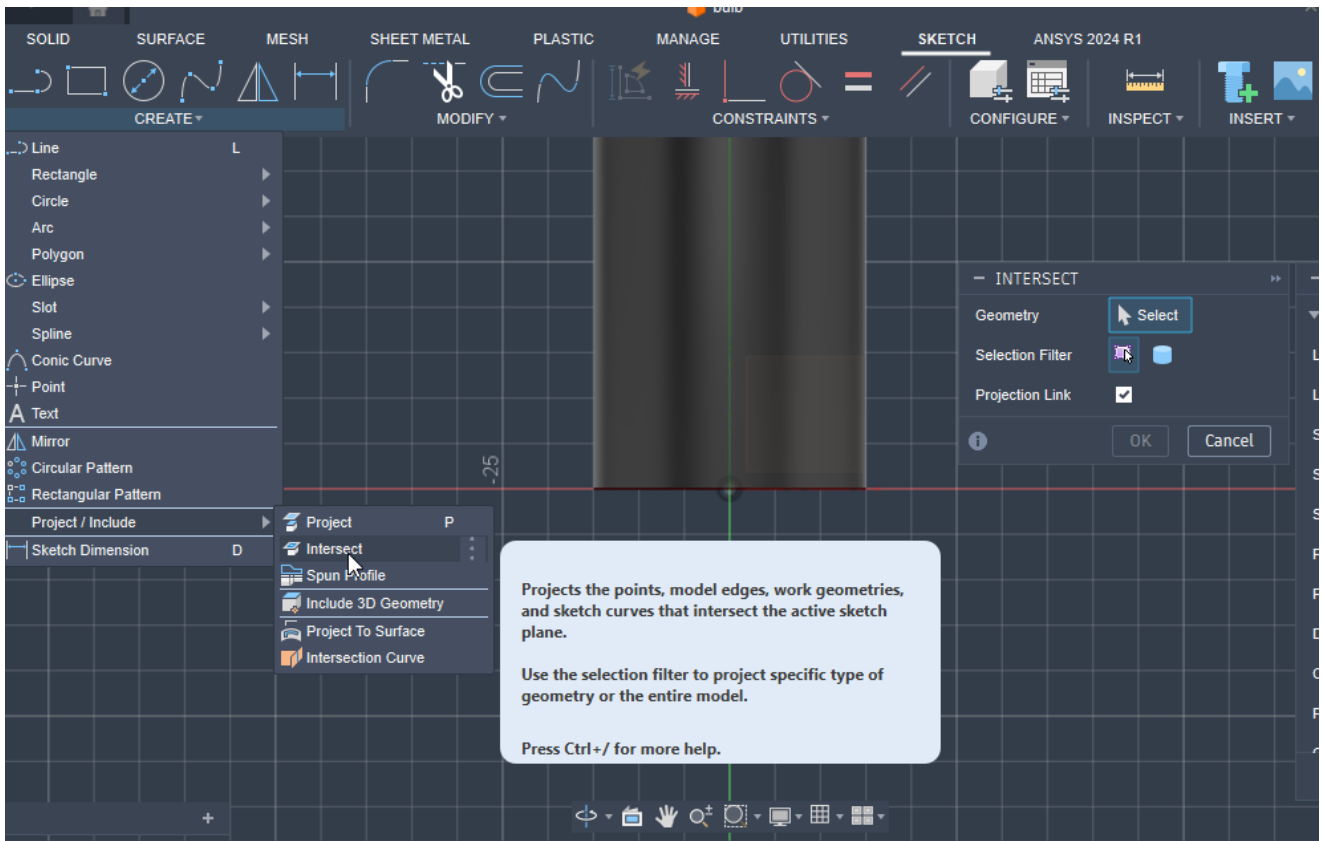


Set these dimensions for the cylinder (example: Ø30mm × 40mm height).

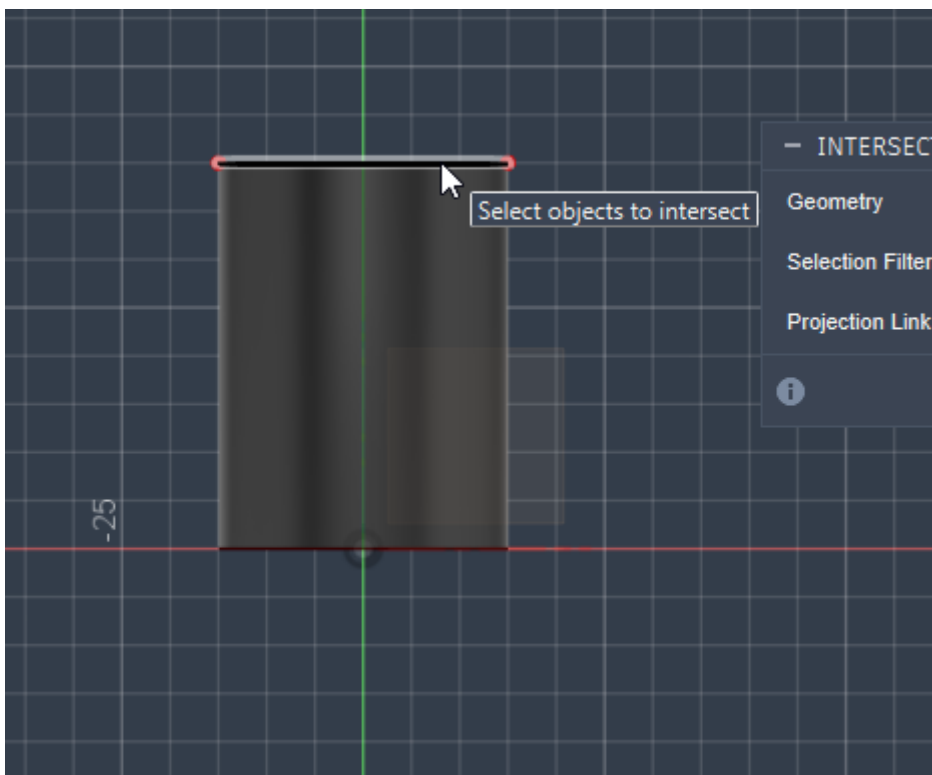


Create a sketch on the XZ origin plane.

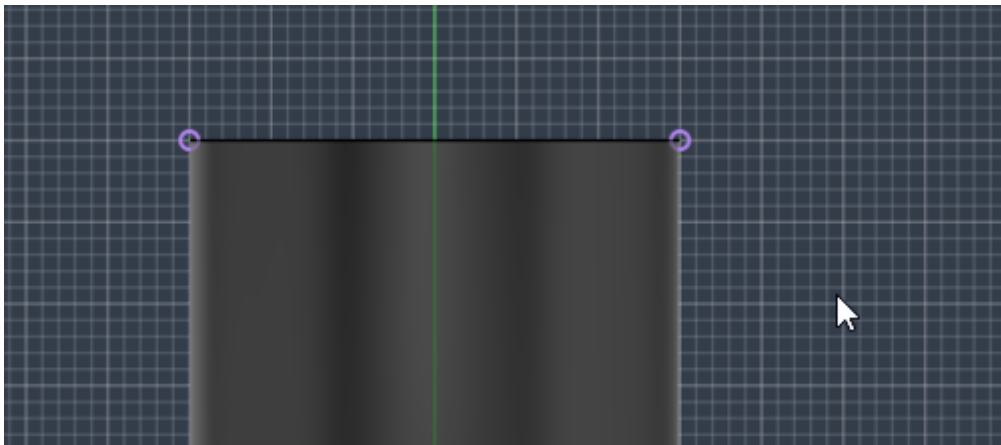
(This plane cuts the cylinder in half, helpful for sphere placement.)



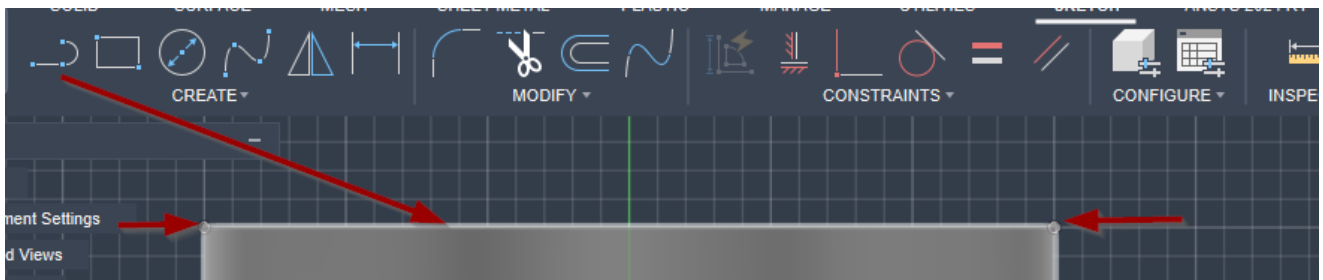
Open Intersect (Project/Include → Intersect).



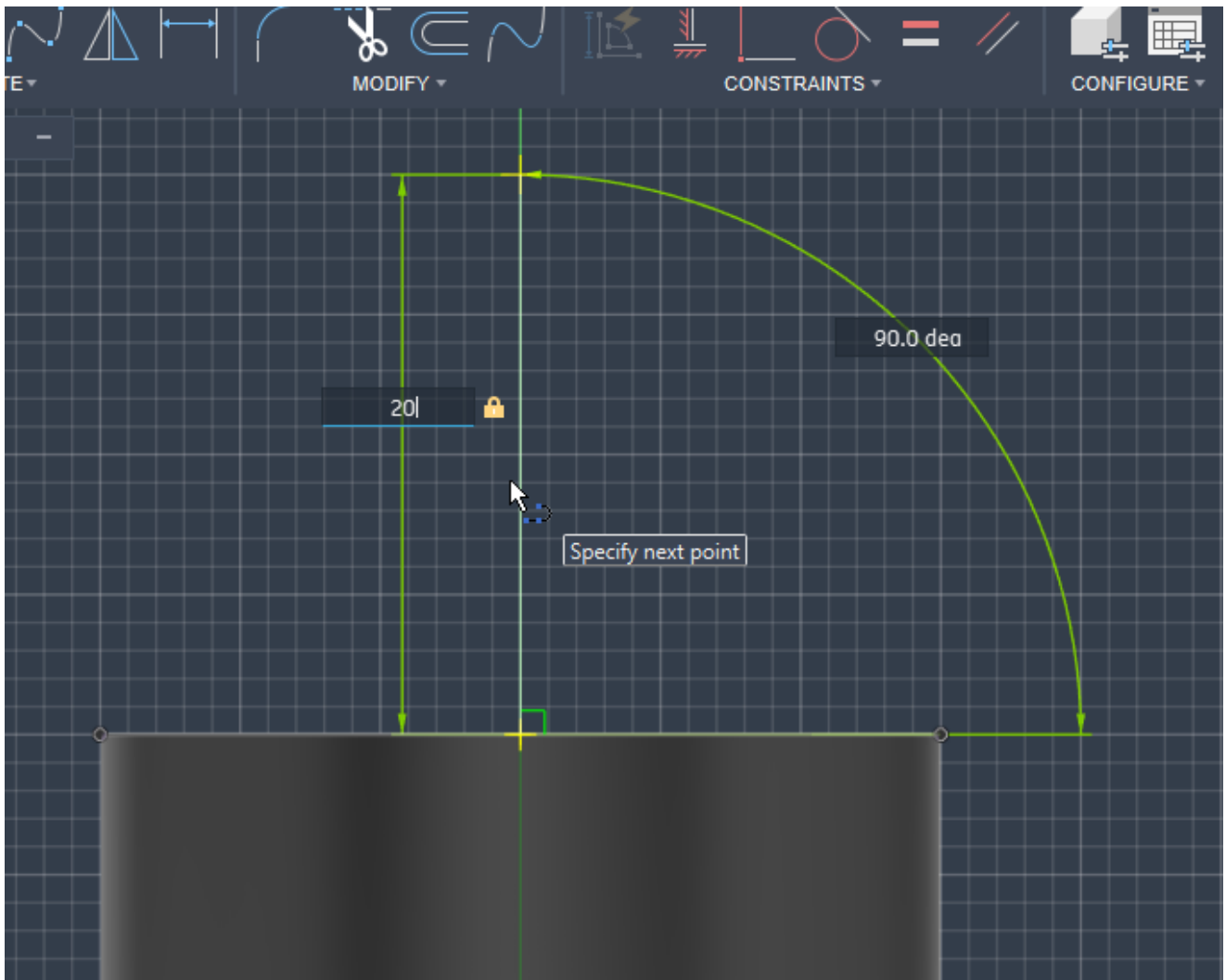
Select this upper edge/line to project cylinder edges.



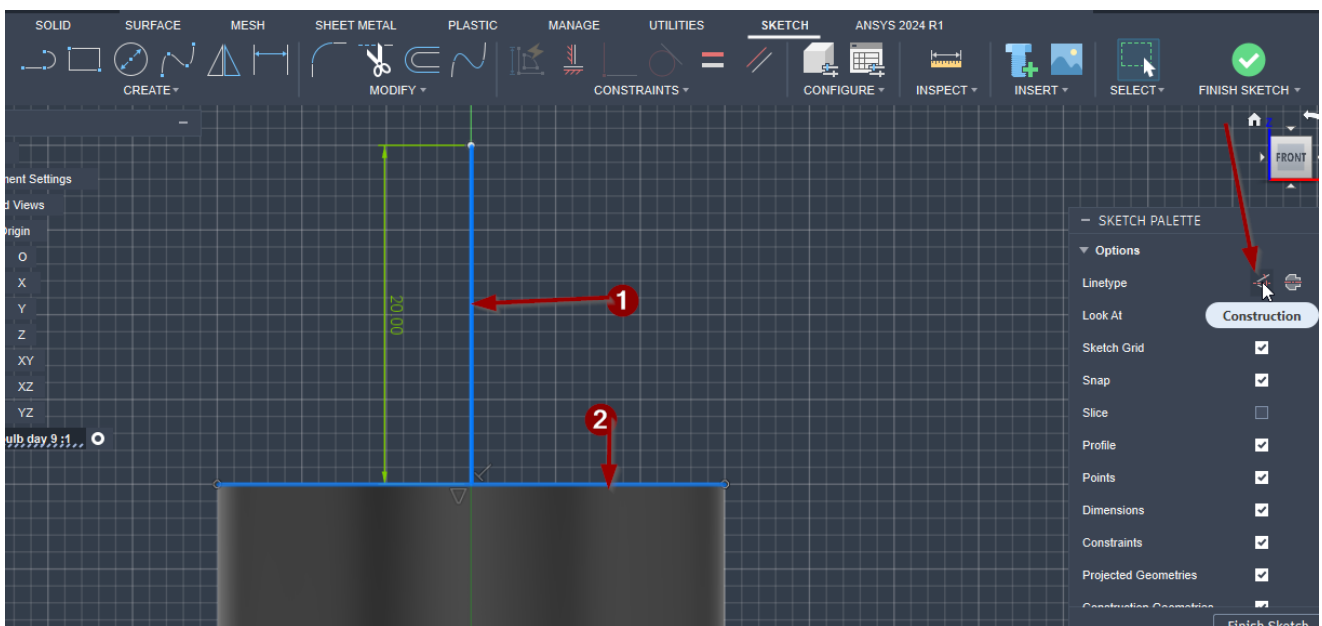
Projected points created (purple). Done.



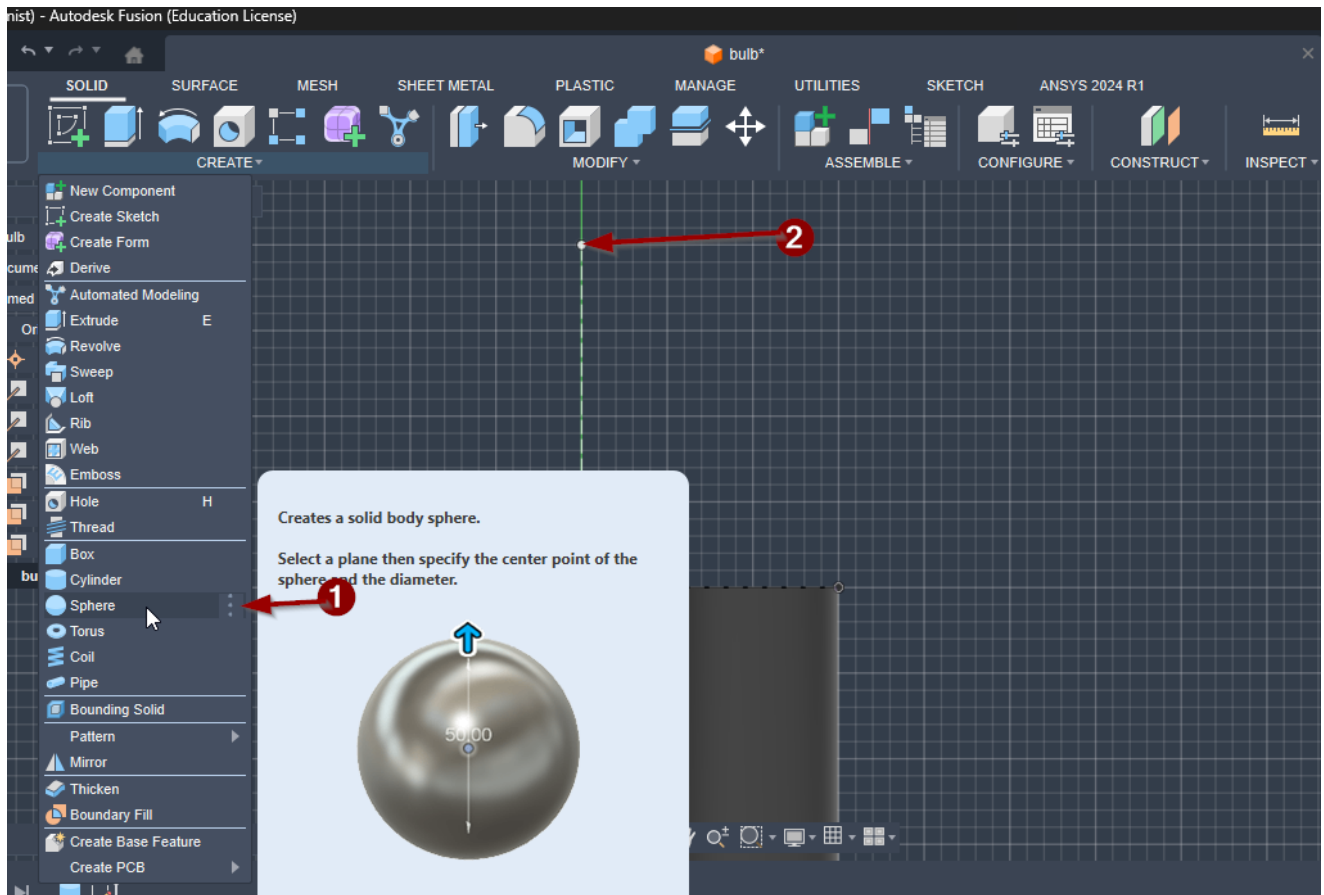
Use Line tool to connect the two projected points.



Create a 20mm vertical line from mid-point upward.
 (This gives reference for the sphere center.)

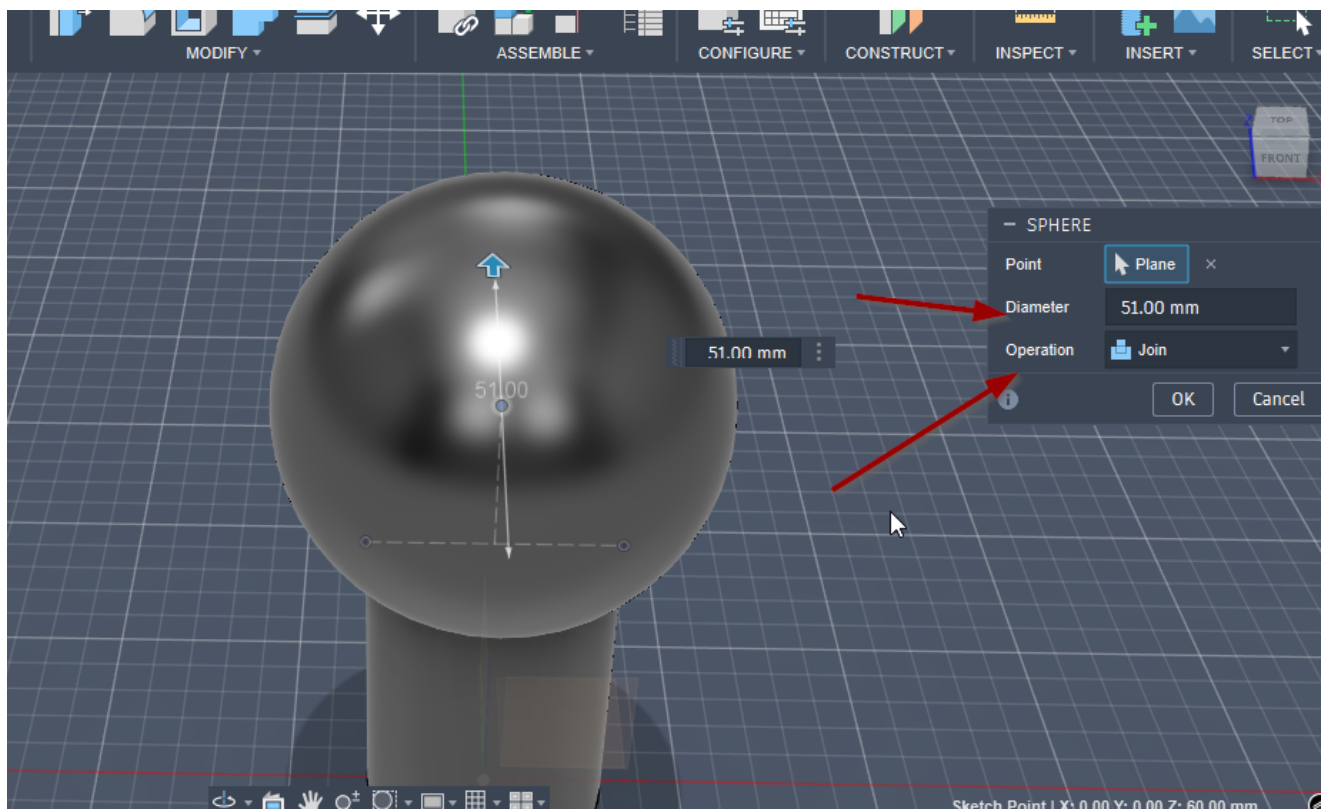


Shift-select lines (1) and (2) → Mark as Construction.
 (This keeps them reference-only.)



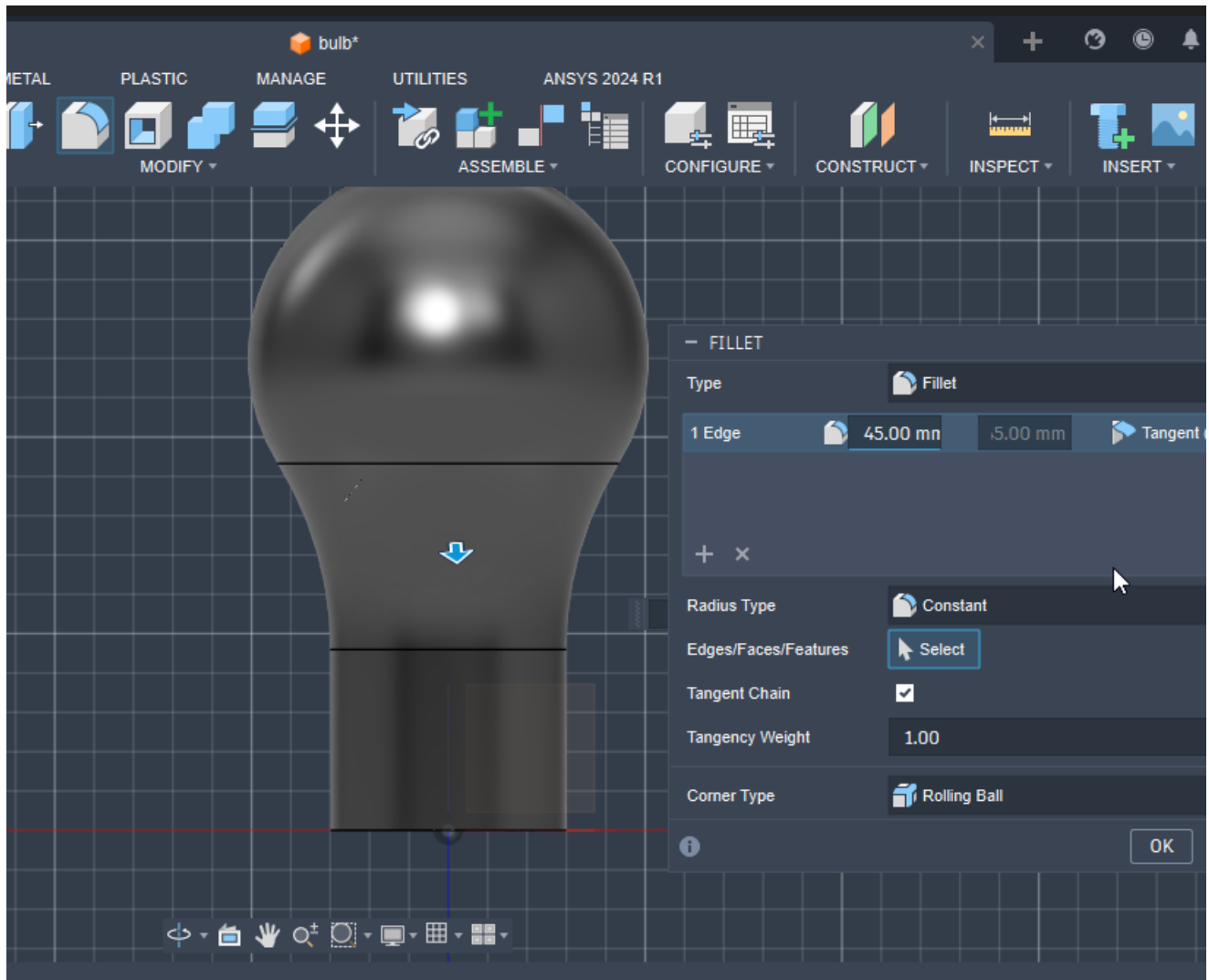
****Create a Sphere:**

1. Click Sphere
2. Select the endpoint of your construction line as sphere center**

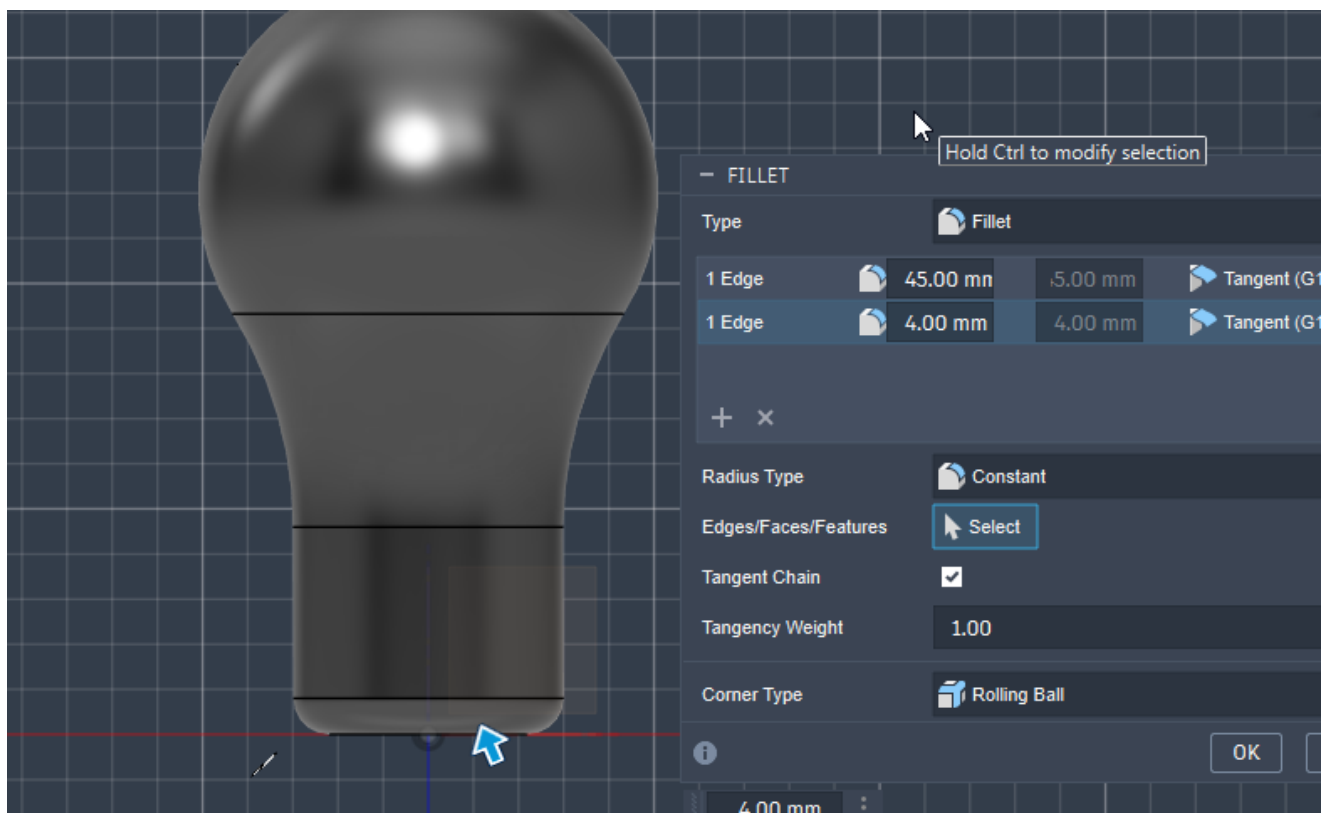


Set sphere diameter 51 mm.

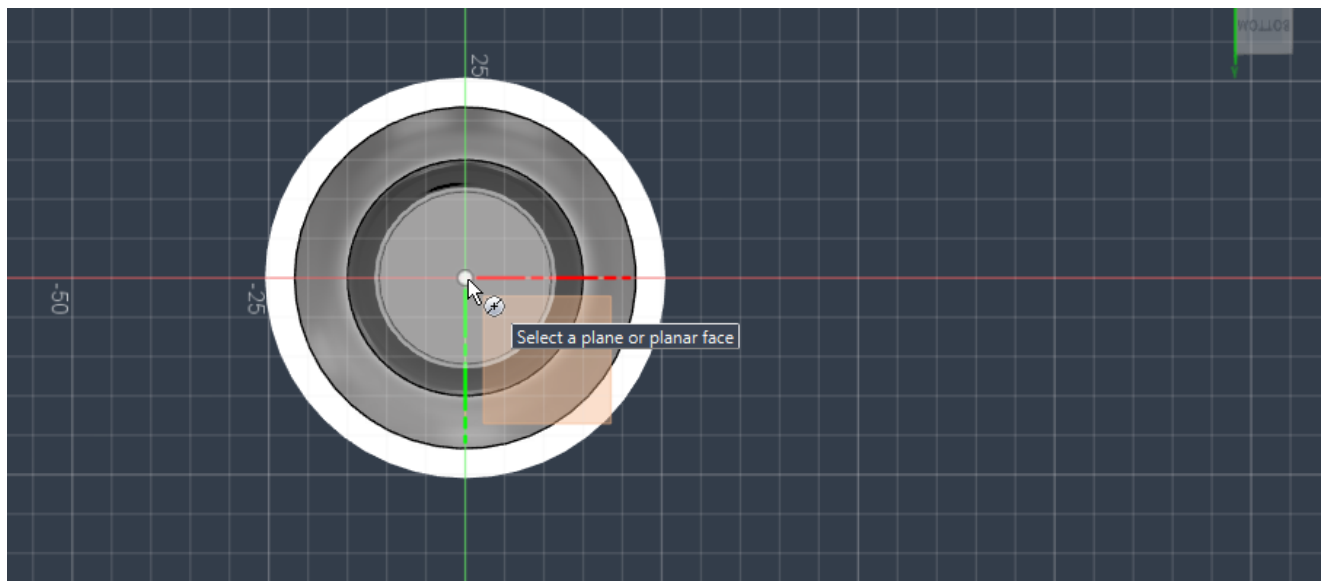
Operation = Join.



Add a 45mm fillet where sphere meets cylinder.



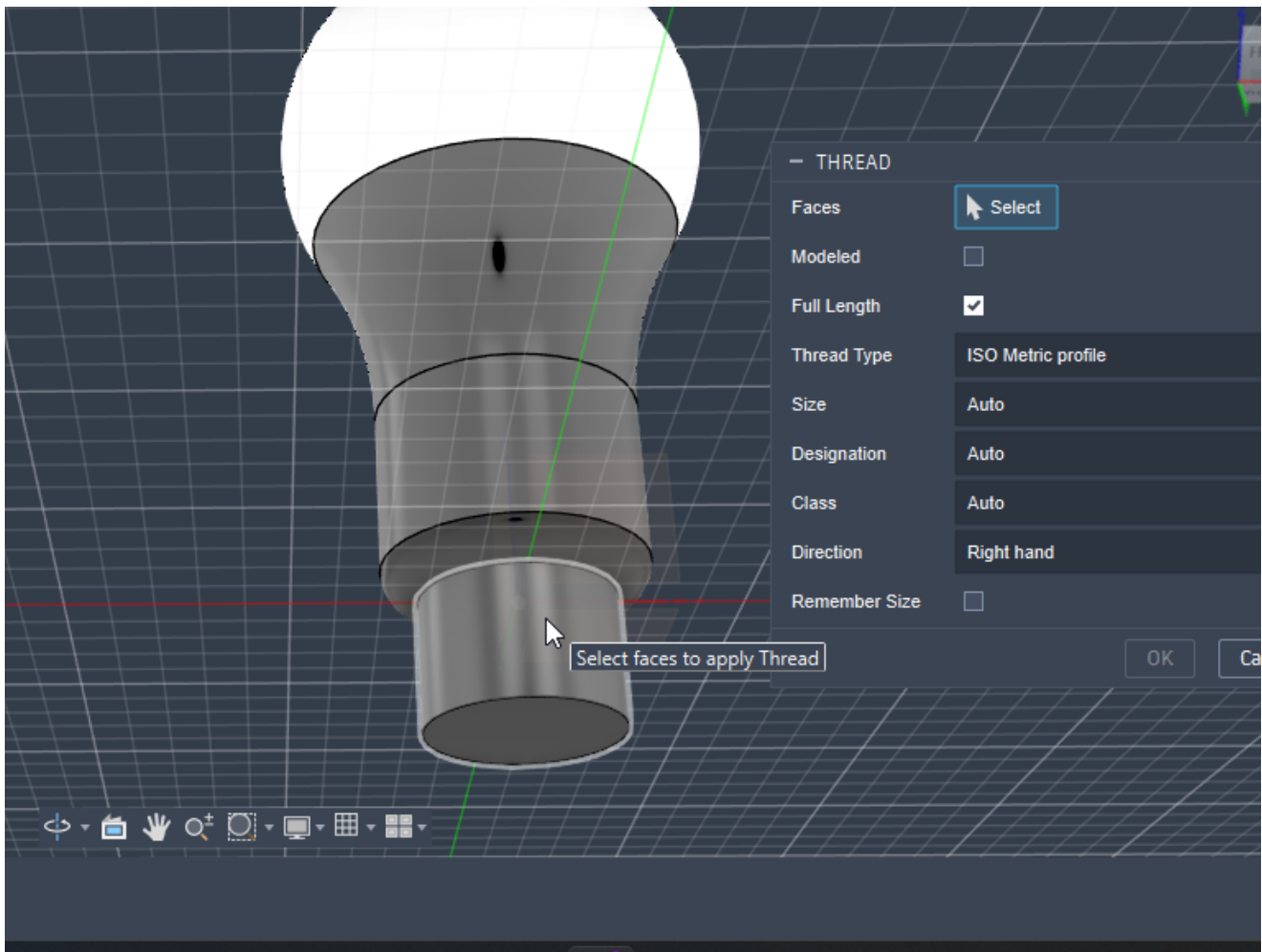
Add a 4mm fillet on the lower edge.



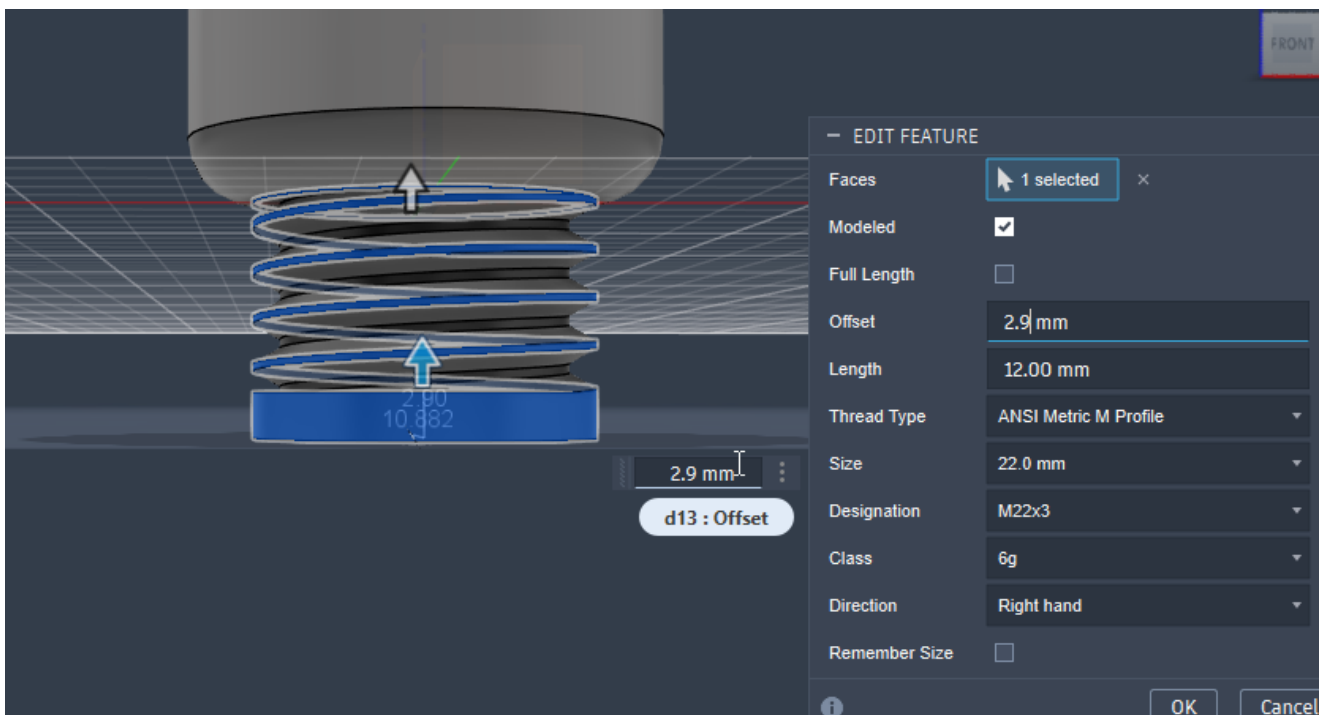
From bottom → Create a cylinder: Ø22 mm, height 15 mm.

Operation = New Body.

(This is required for threading.)



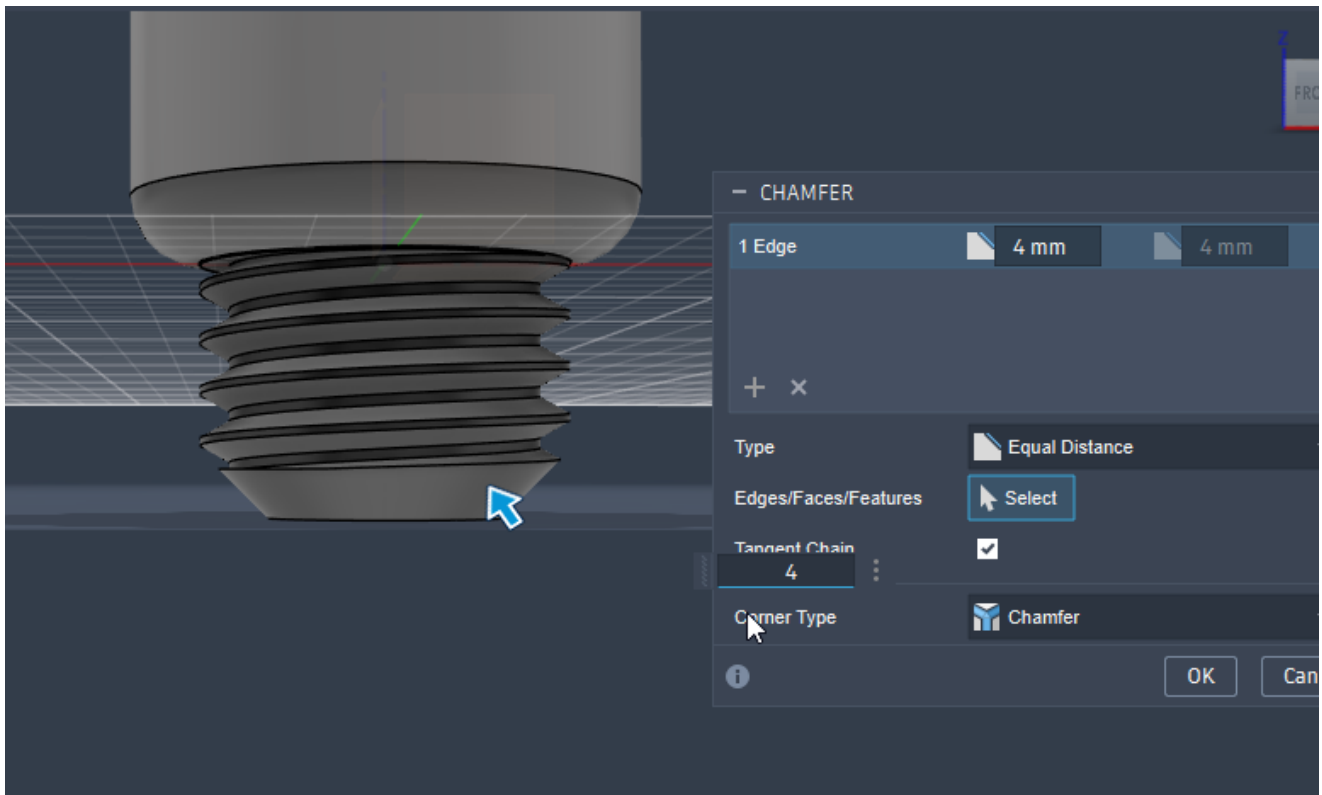
Go to Thread command and select the cylindrical face.



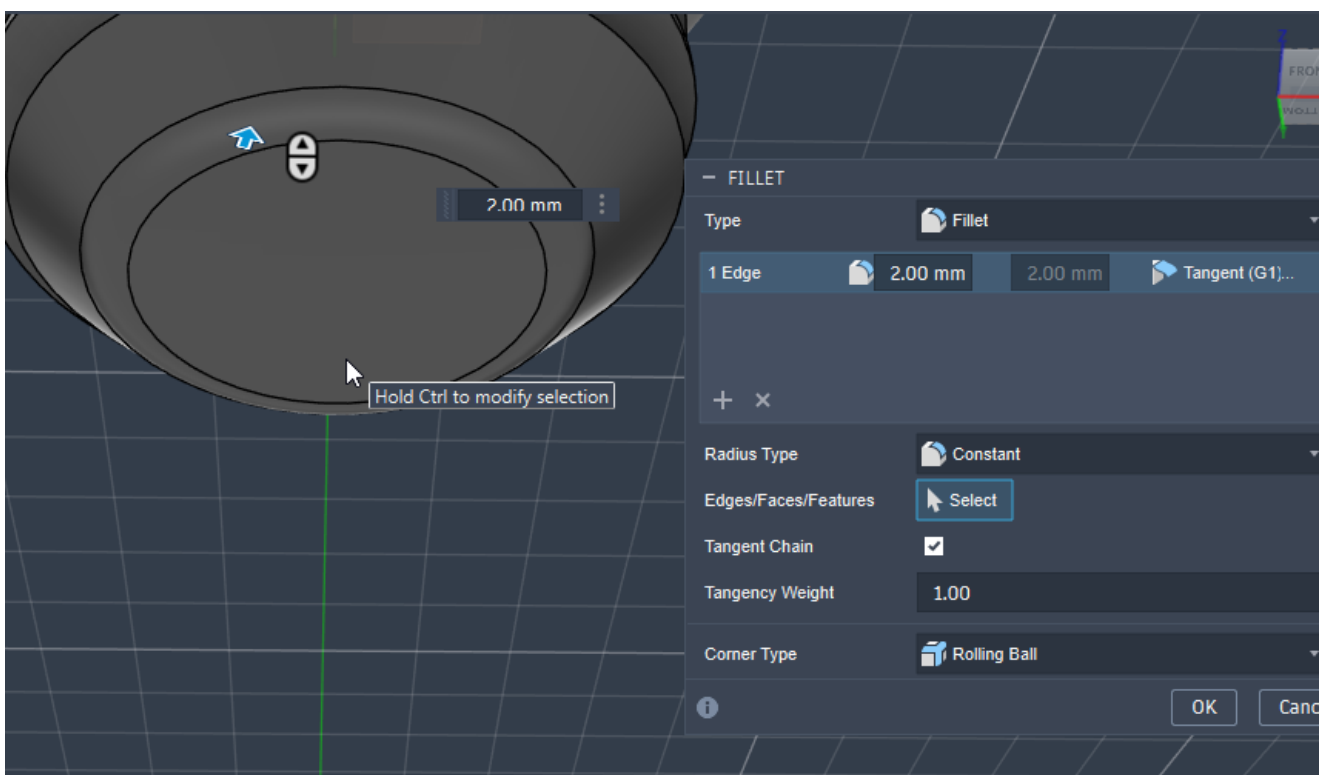
Set thread parameters:

- Type: ANSI Metric M
- Size: M22x3

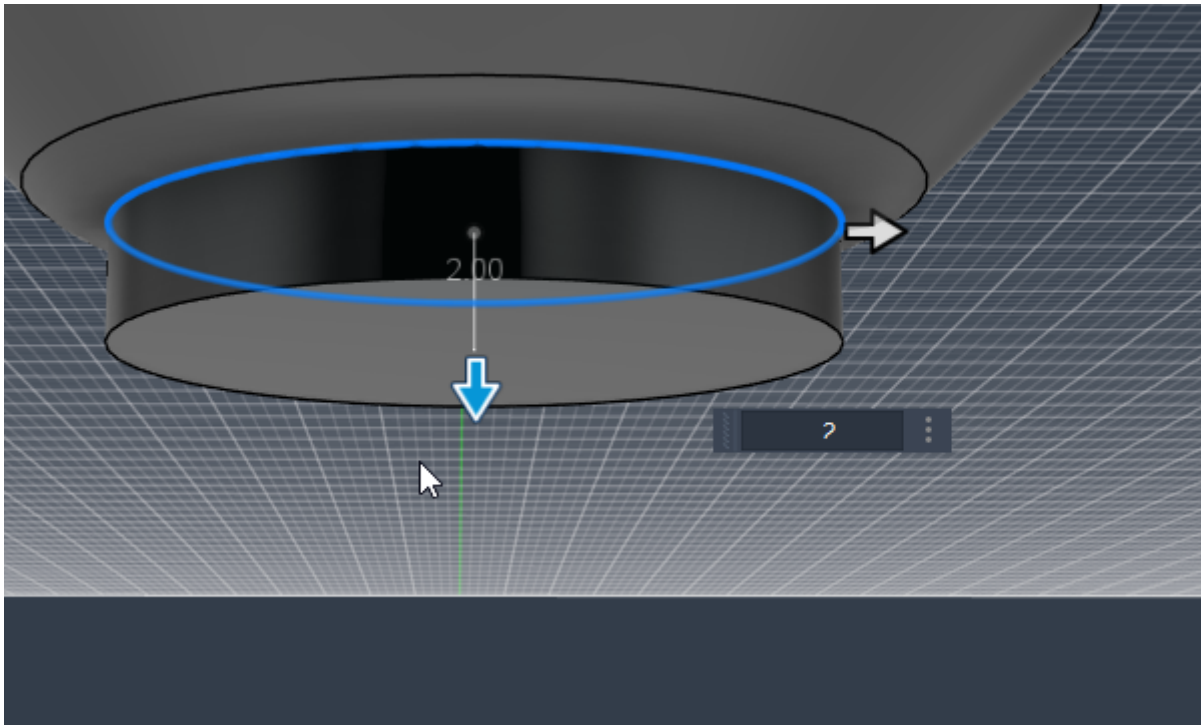
- Modeled = ON
- Uncheck Full Length
- Offset bottom ~3mm



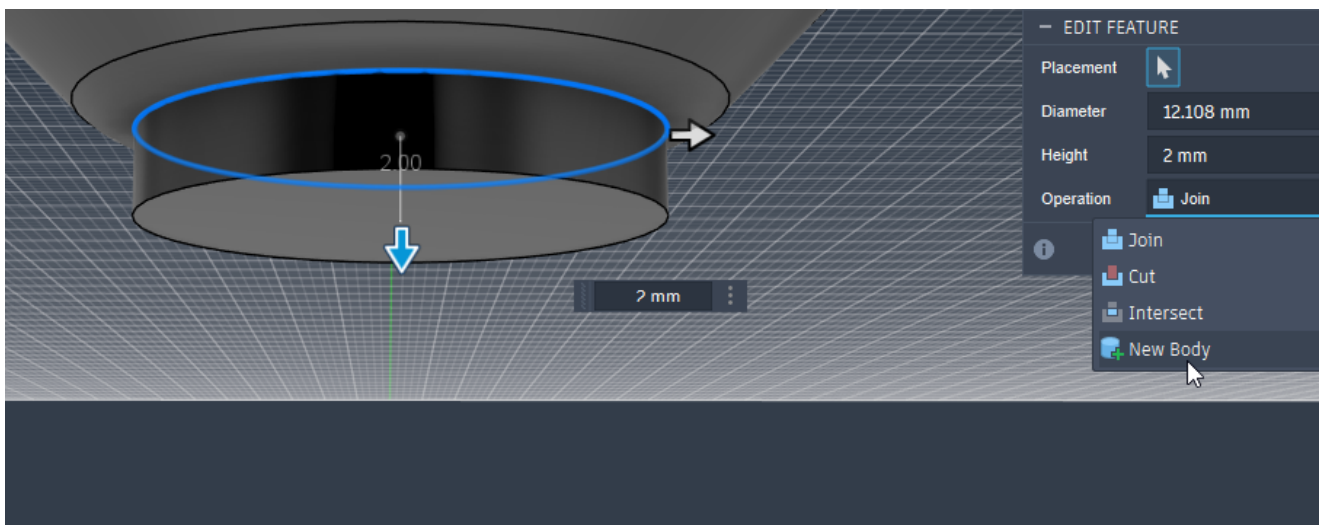
Add Chamfer = 4mm (sharp bottom edge of threaded part).



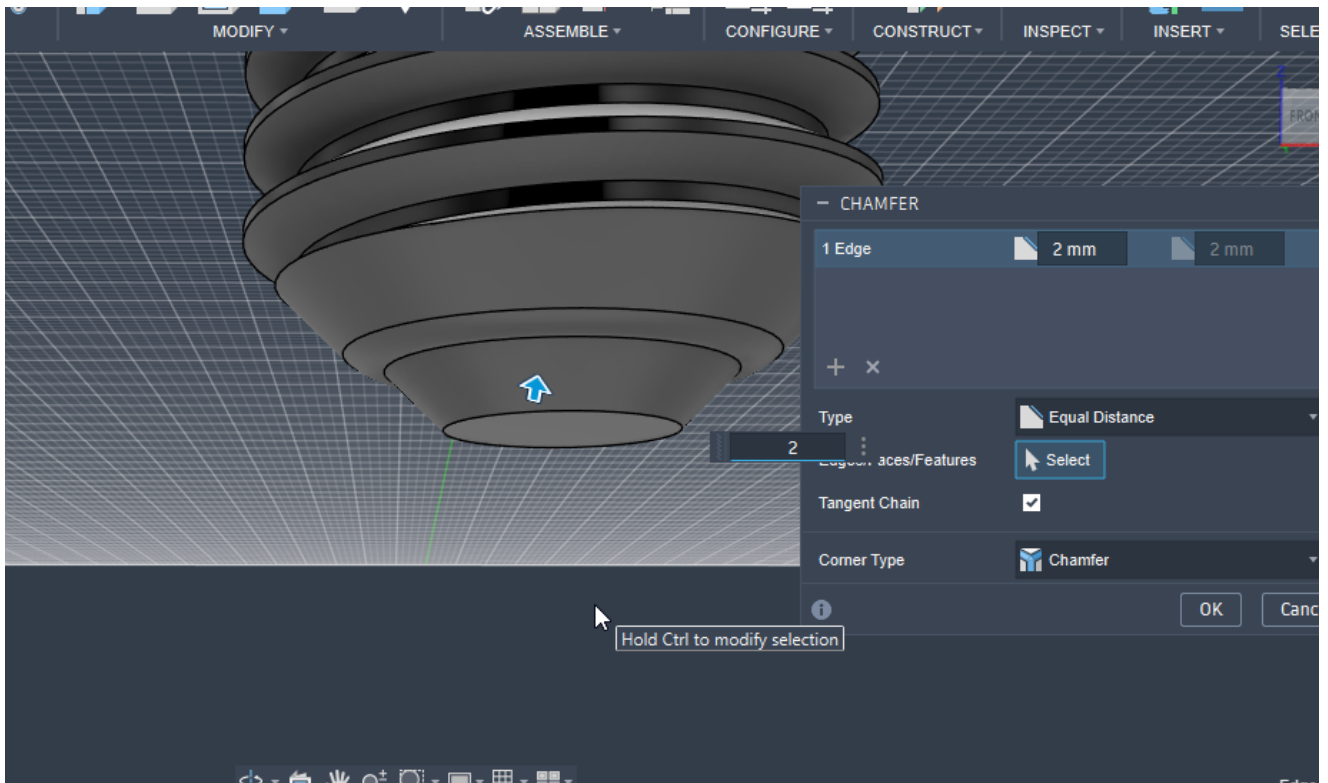
Add a 2mm Fillet to soften transition.



Add another cylinder: $\varnothing 2\text{mm}$, height 2mm → electrical foot contact.
Operation = New Body.



Confirm it is set as New Body (important for separate appearance).



Apply final 2mm Chamfer to the foot contact.
