

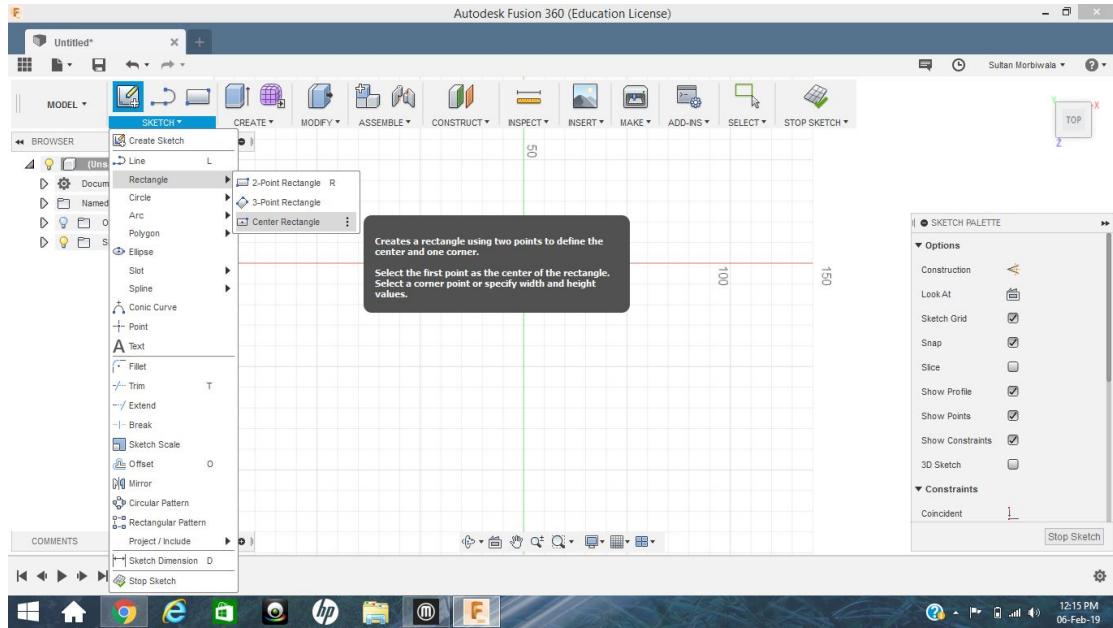


FEB 16 - SPECIAL WORKSHOP AT IN5 DESIGN, D3
DESIGN AND 3D PRINT YOUR OWN JEWELLERY

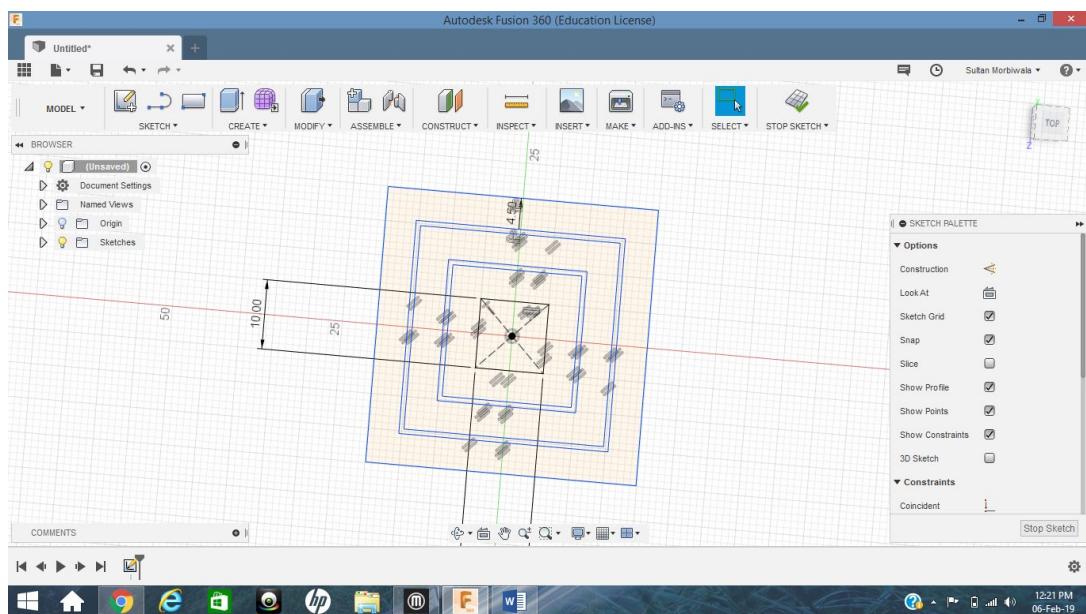


Square Rotating Gimbal Guide

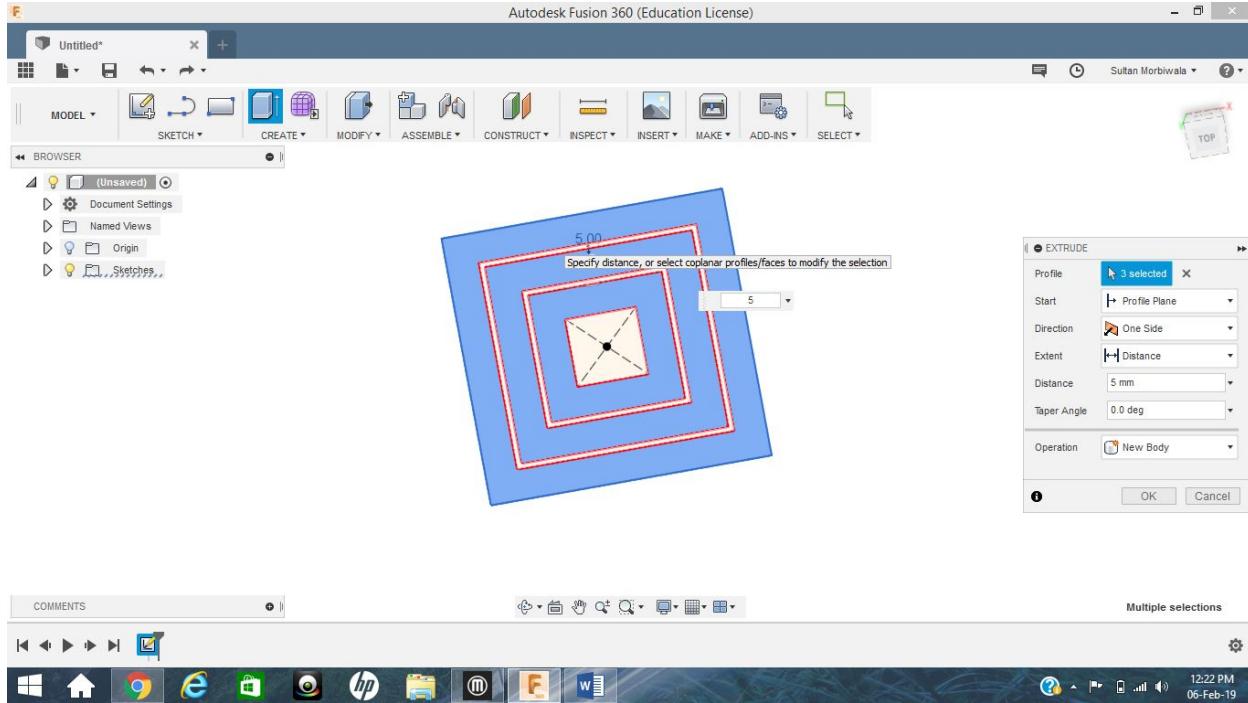
Step 1:- Select a surface on a plane and click on sketch. In sketch option, select ‘center rectangle’



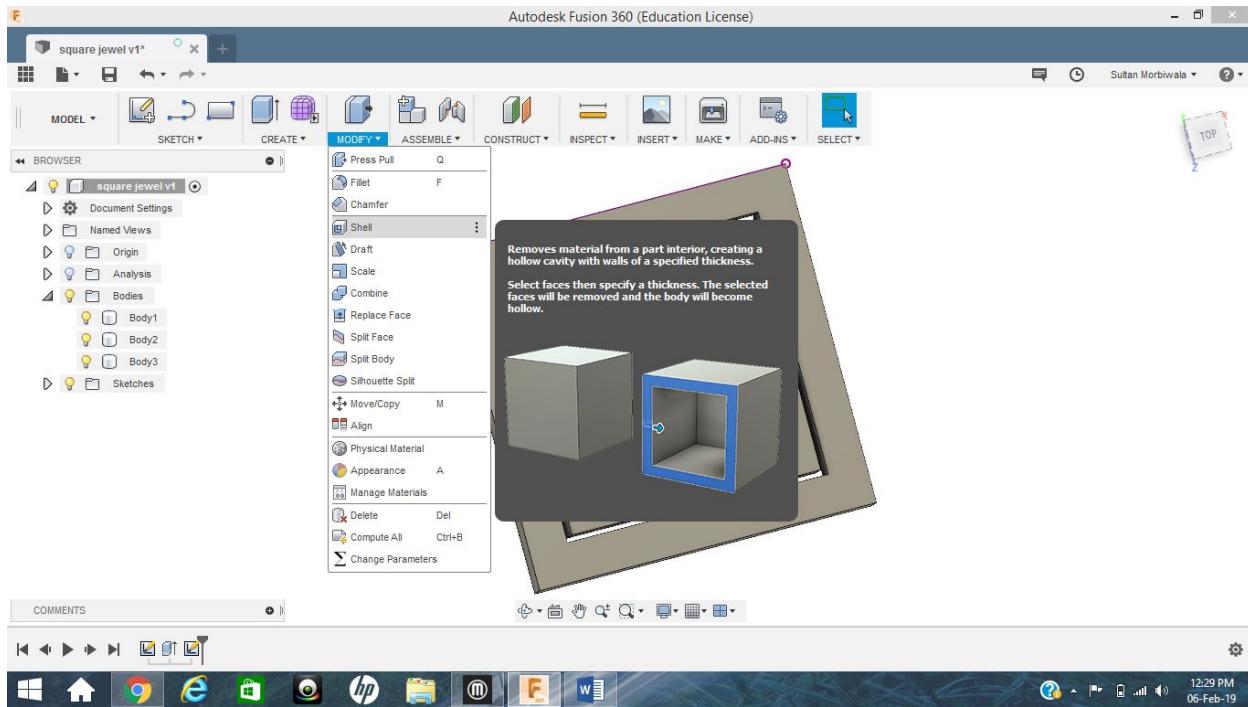
Step 2:- First make square of **10x10mm and start using offset option to make it bigger. Solid square should have offset of **4.5mm** and gap between 2 cubes should be **0.7mm**. Do it till you get 3 cubes.**

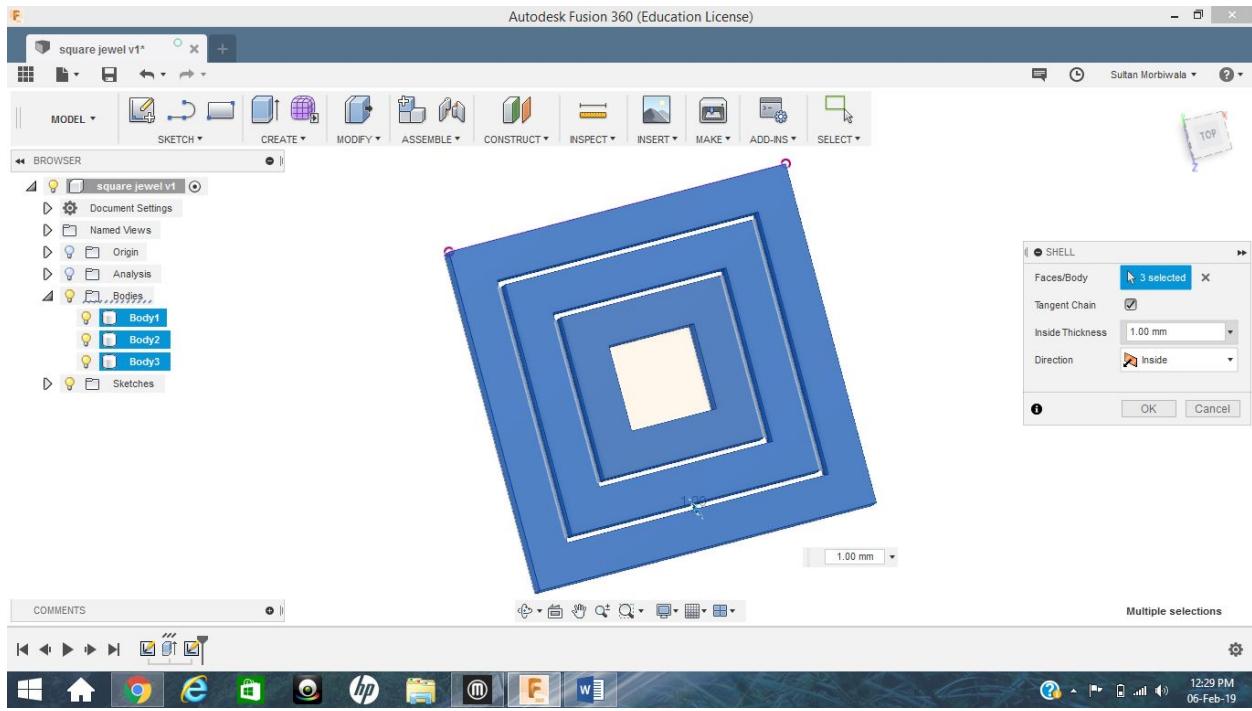


Step 3:- Exit sketch, use extrude feature and select the following areas to increase by 5mm

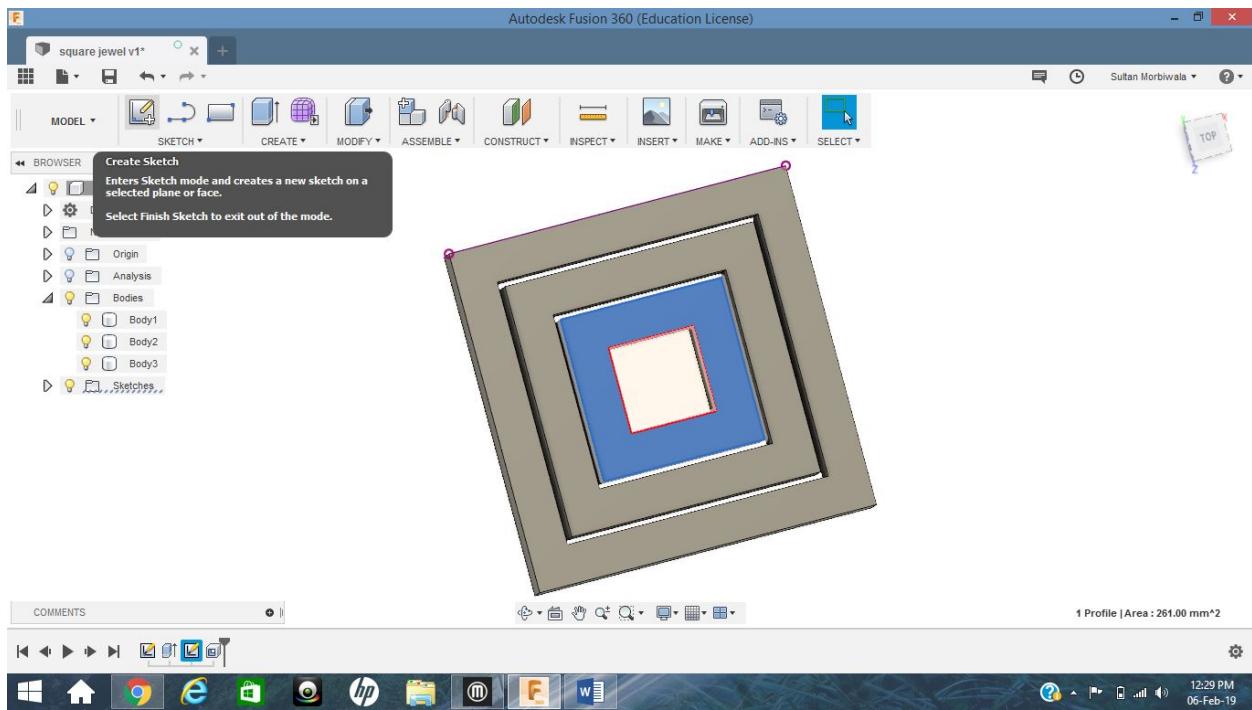


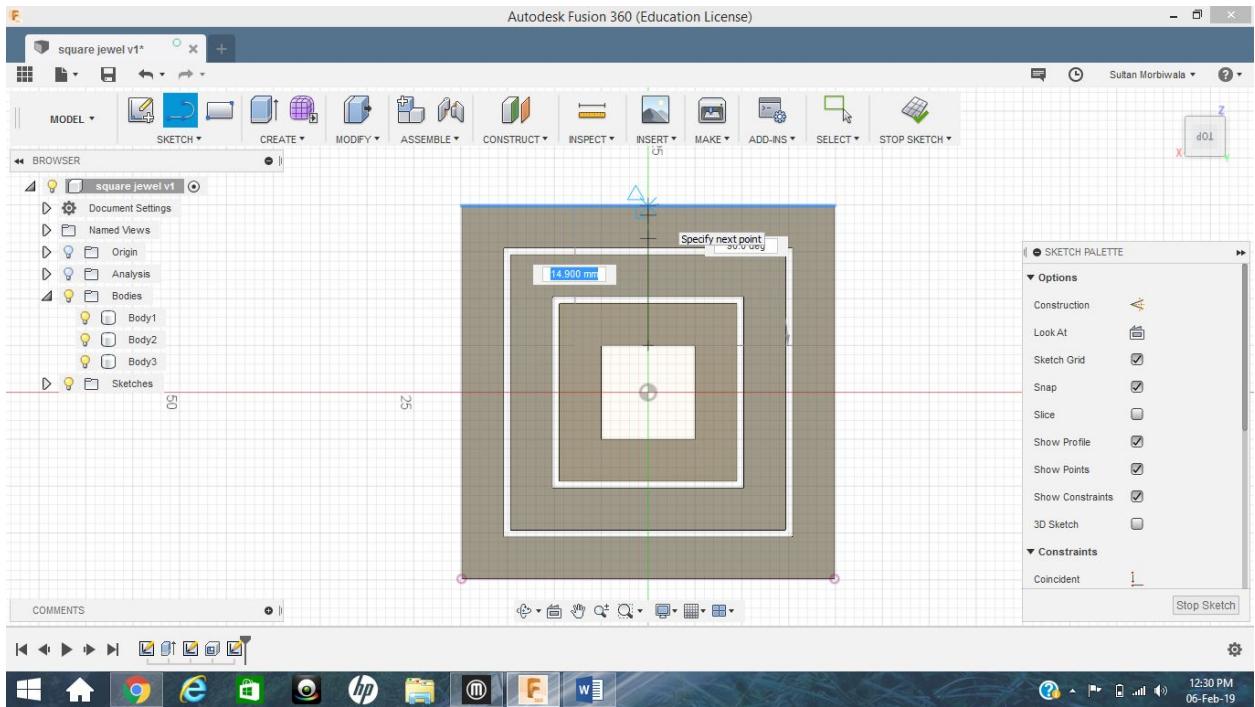
Step 4:- Use the Shell Feature to select 3 bodies and put 1mm thickness



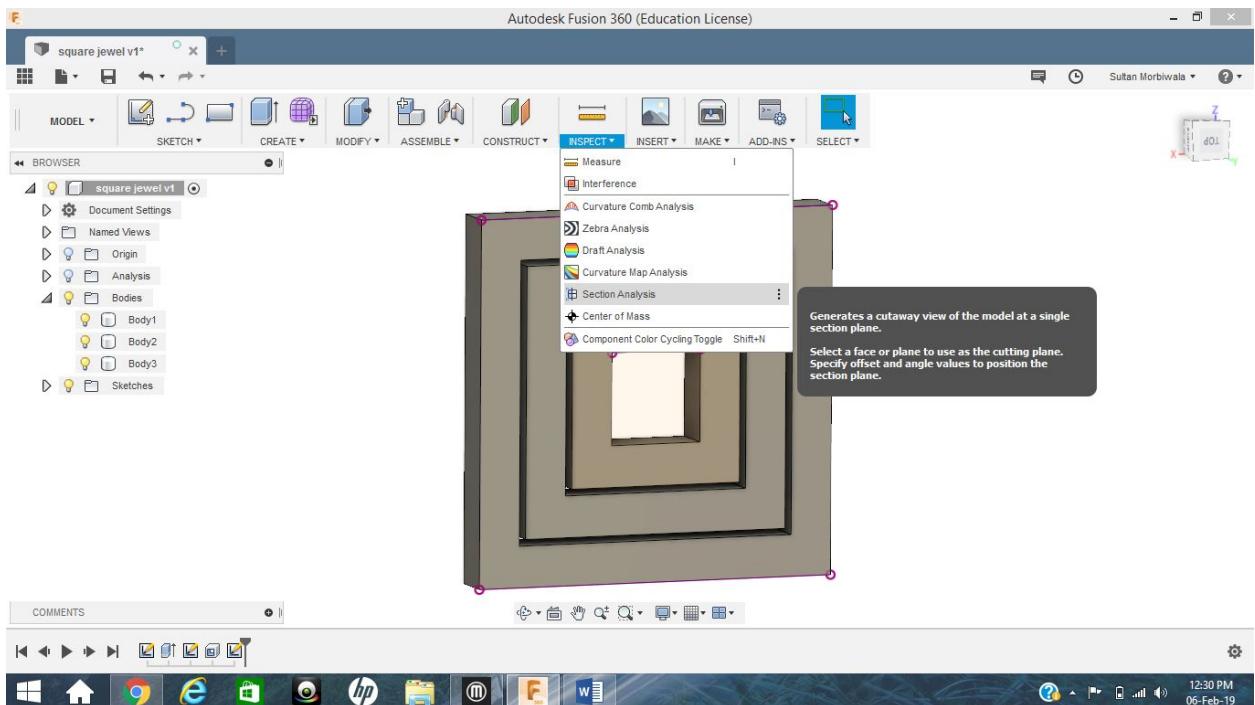


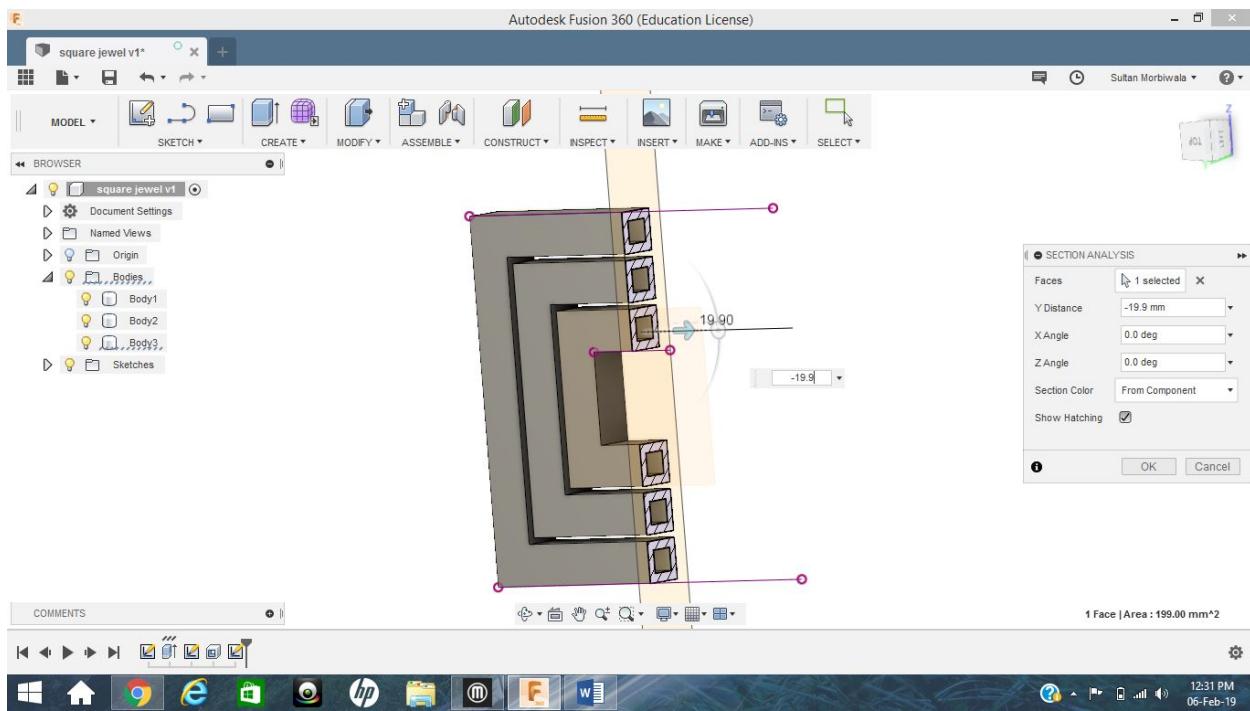
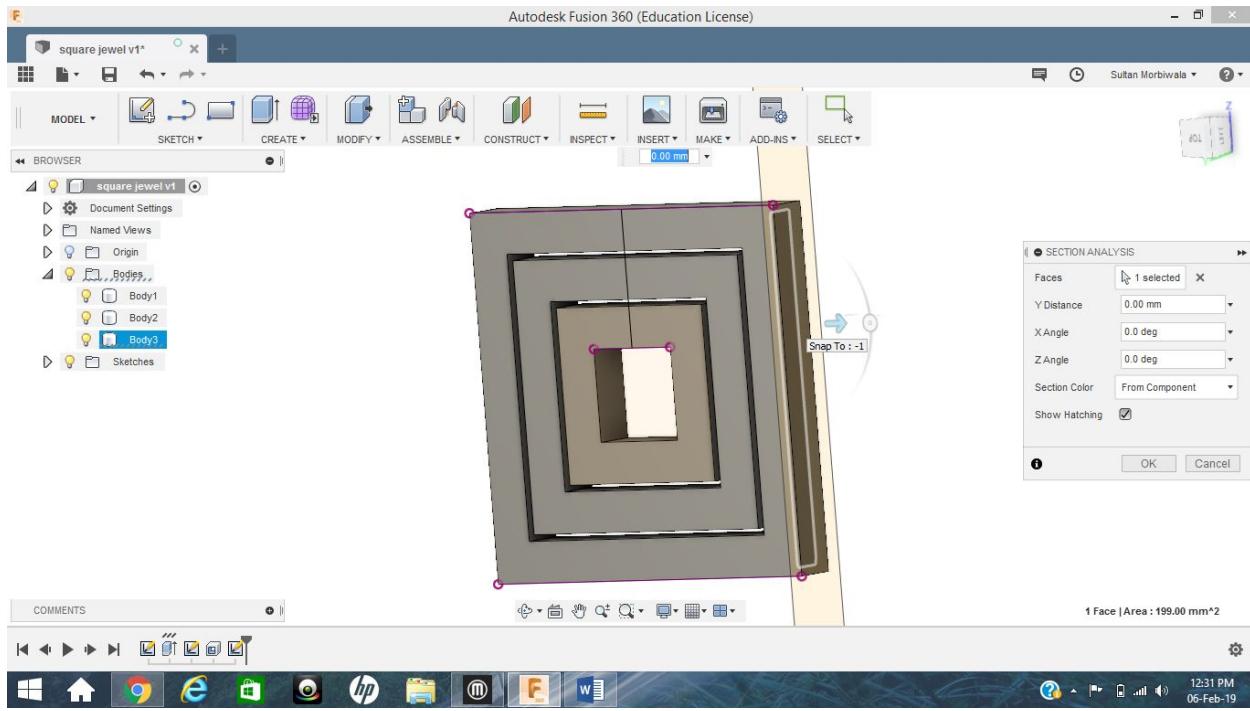
Step 5:- Create Sketch on the top of cube and make straight line perpendicular to the surface.



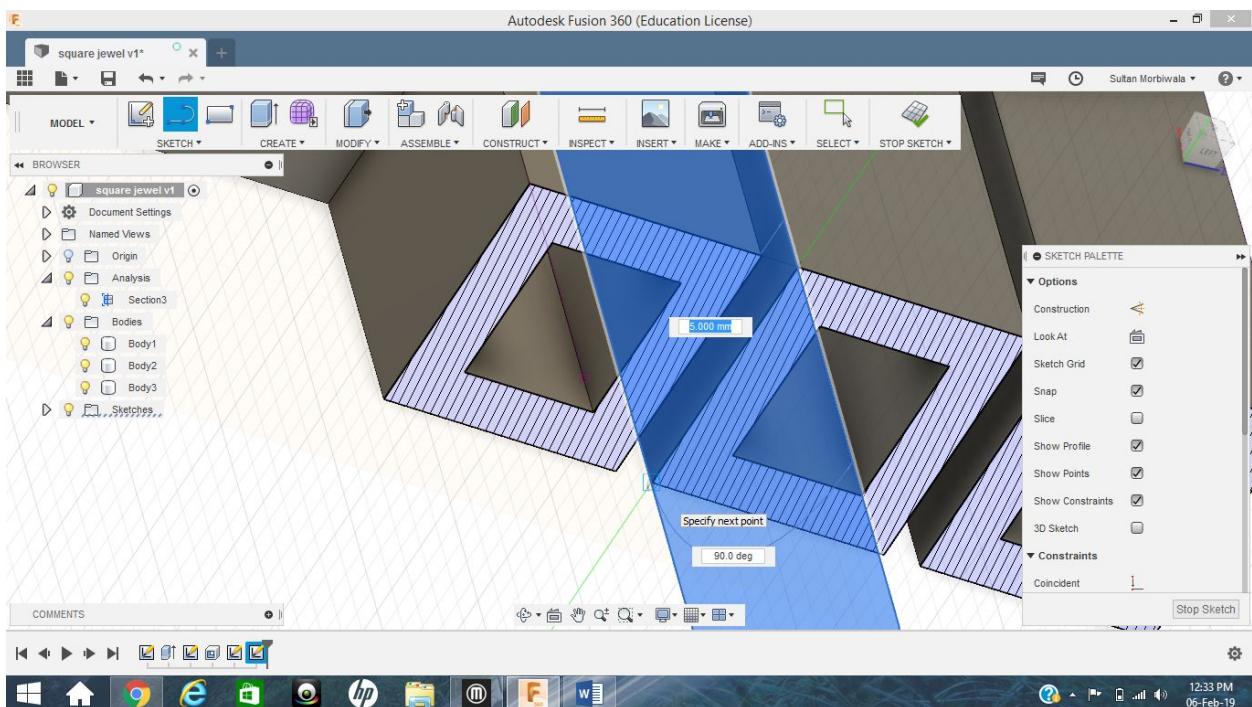
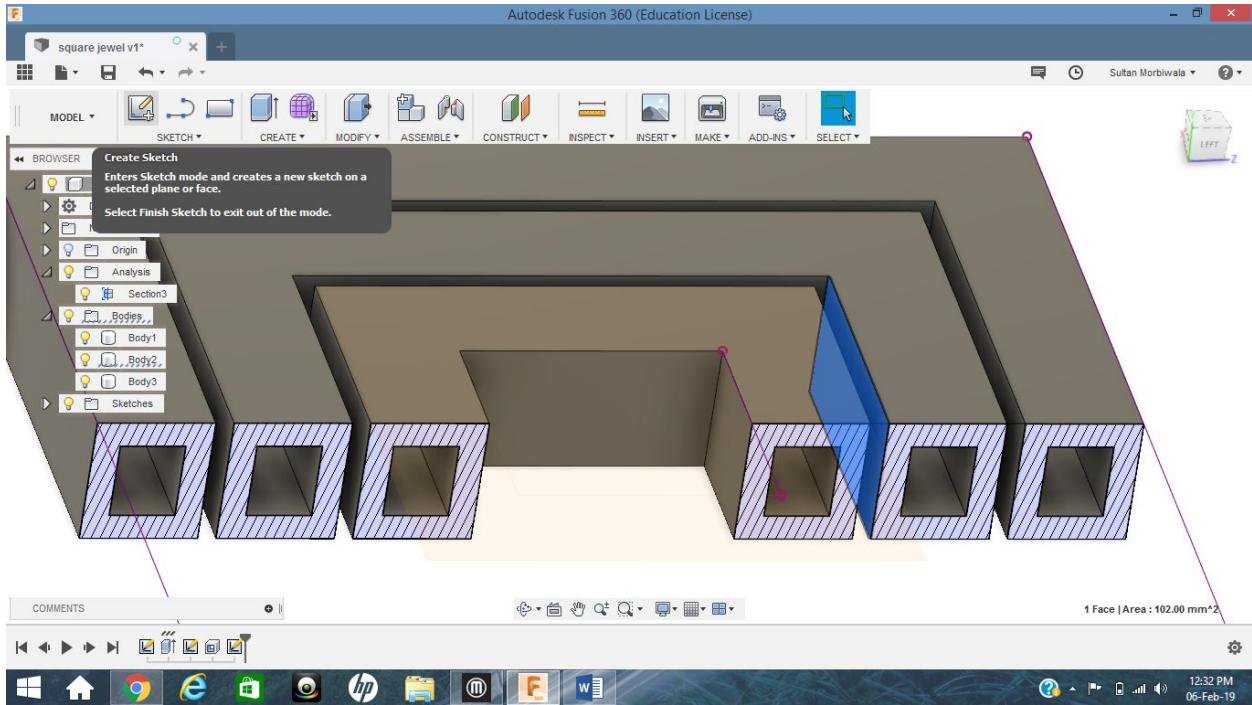


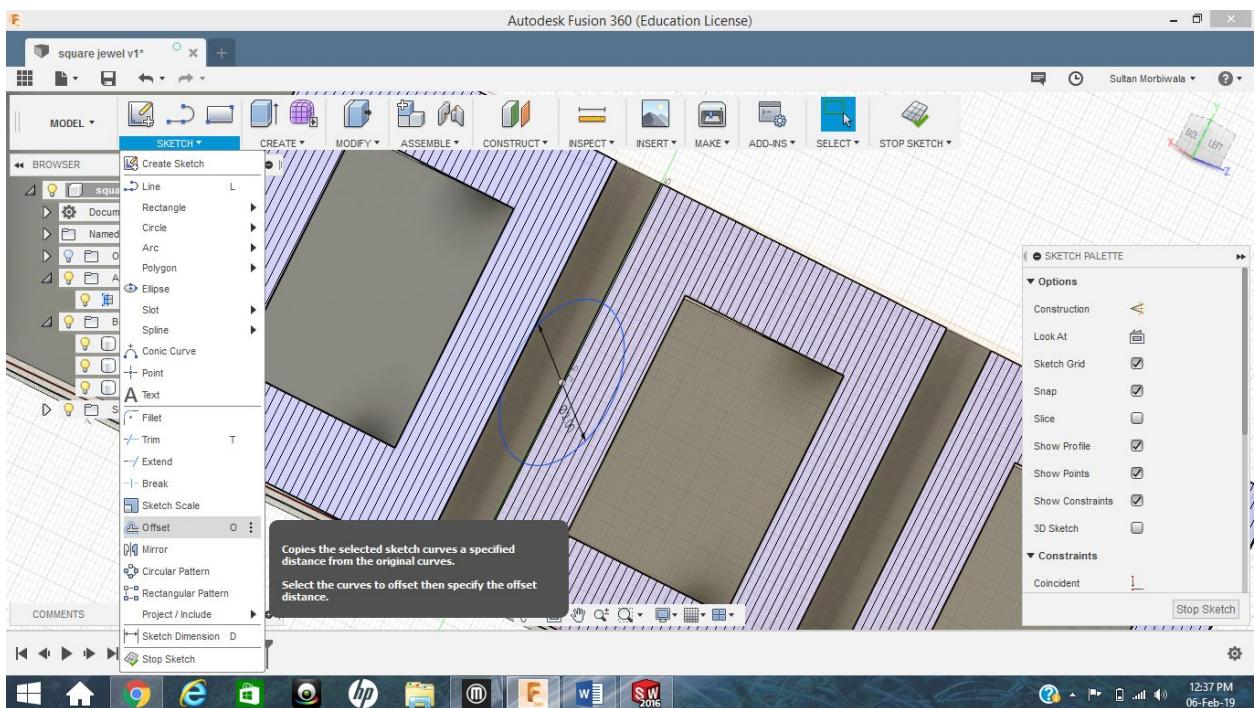
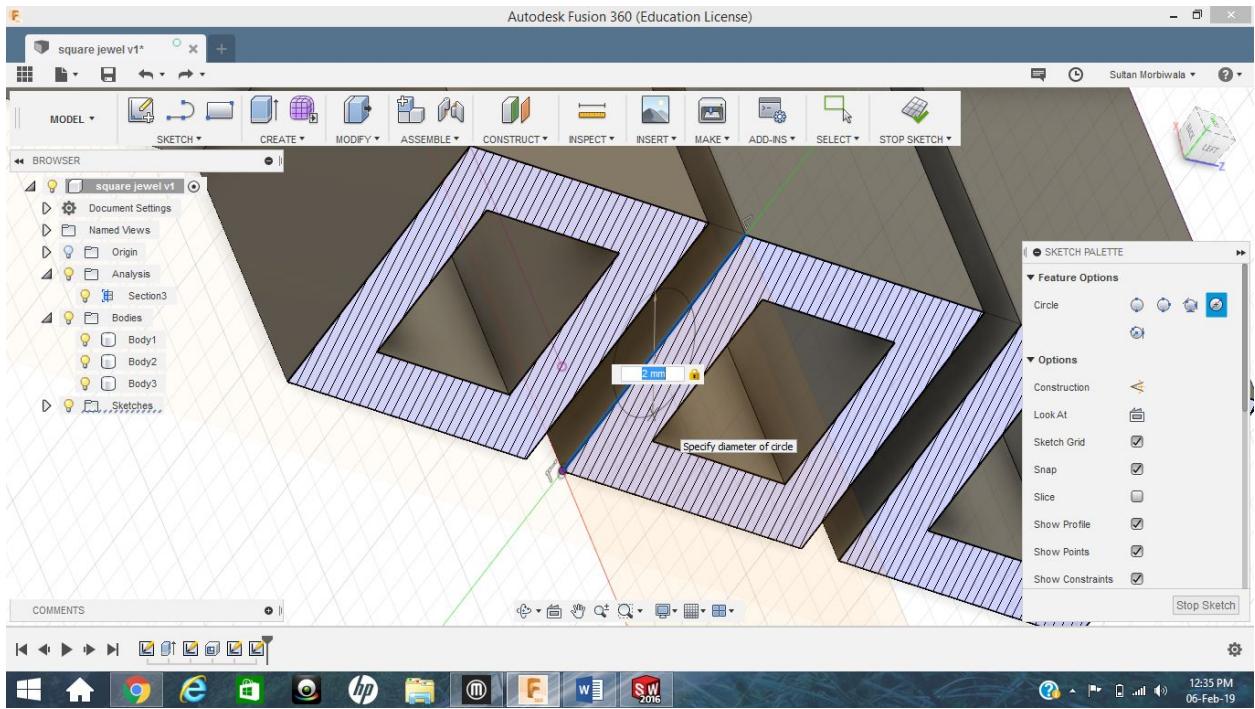
Step 6:- Go to inspect and select sector analysis. Click on the vertical width of cube and drag it to a point which intersects the midpoint line which we drew before.

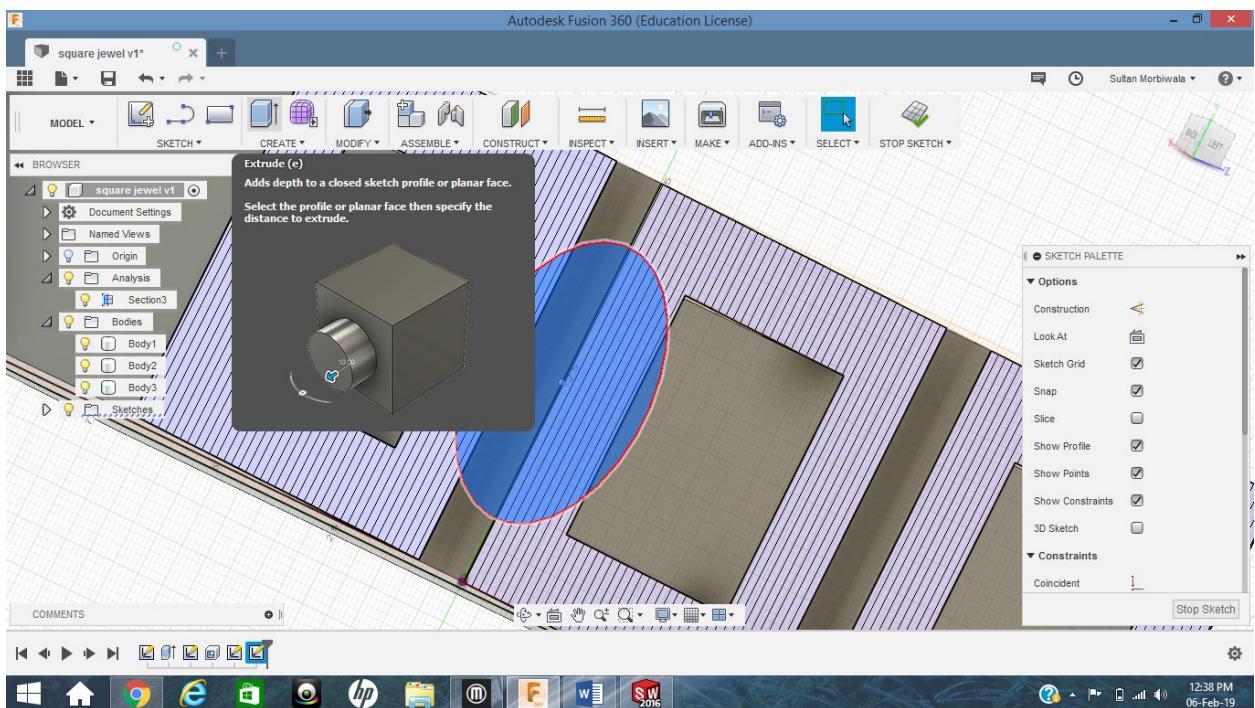
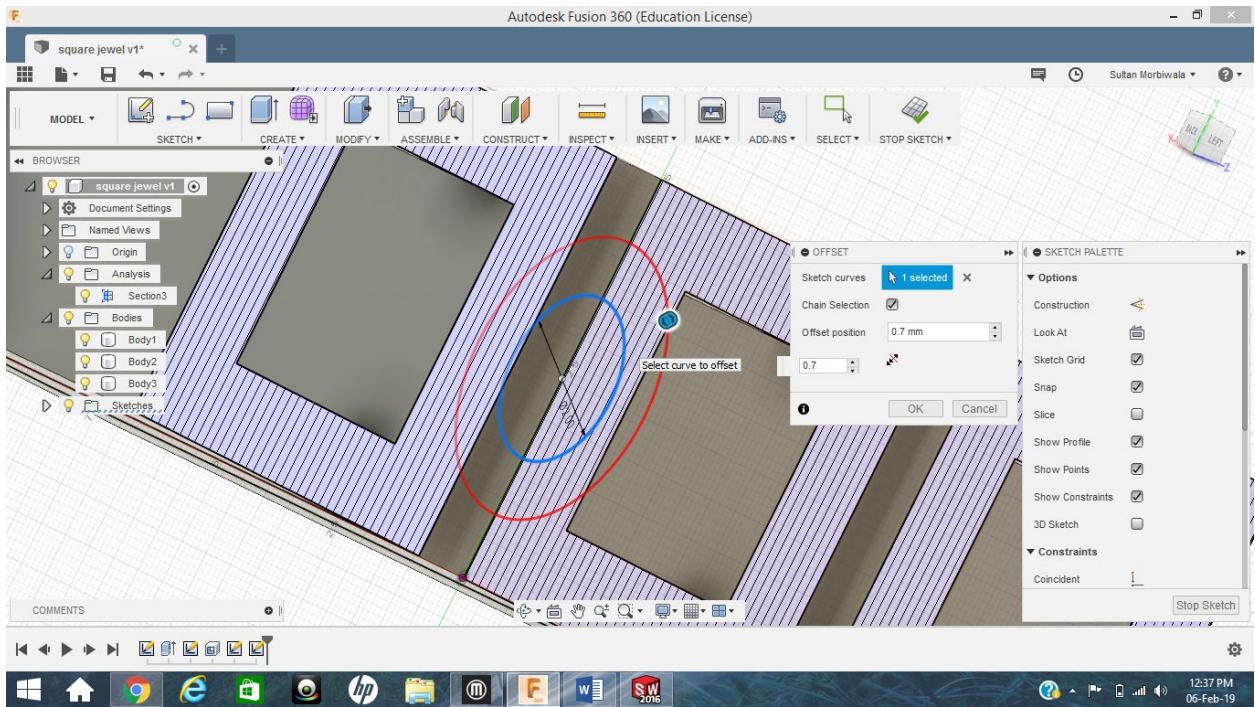


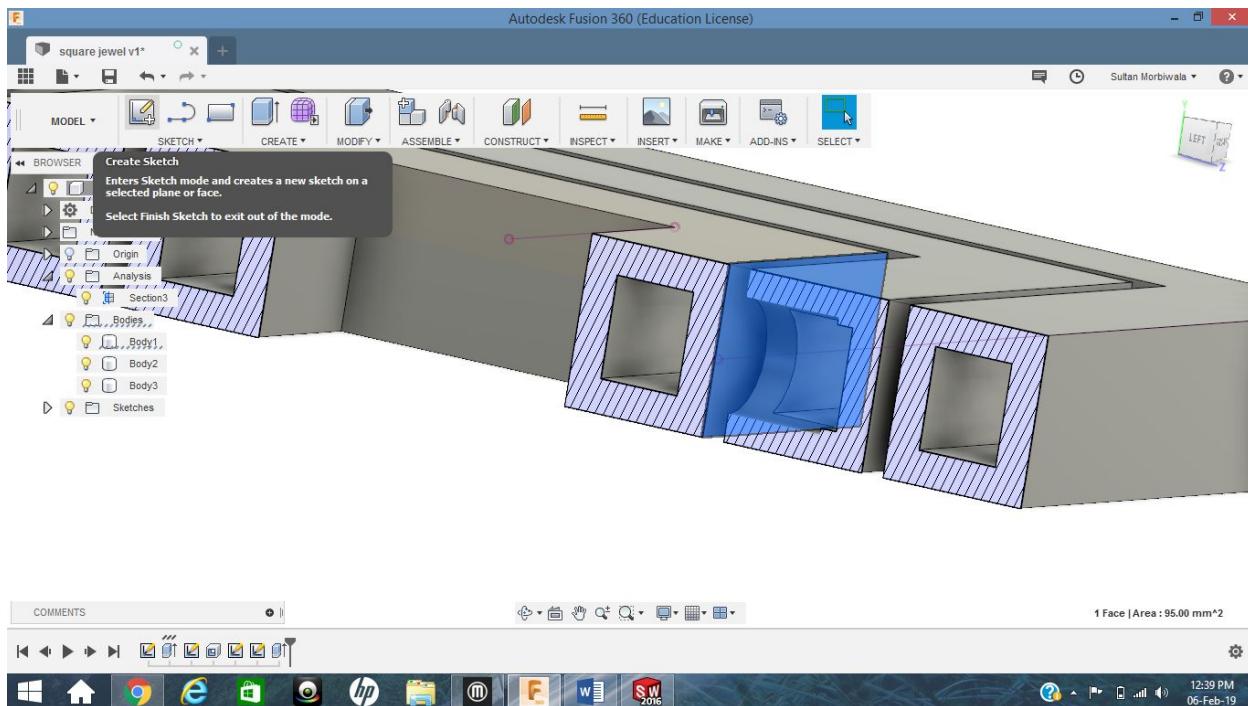
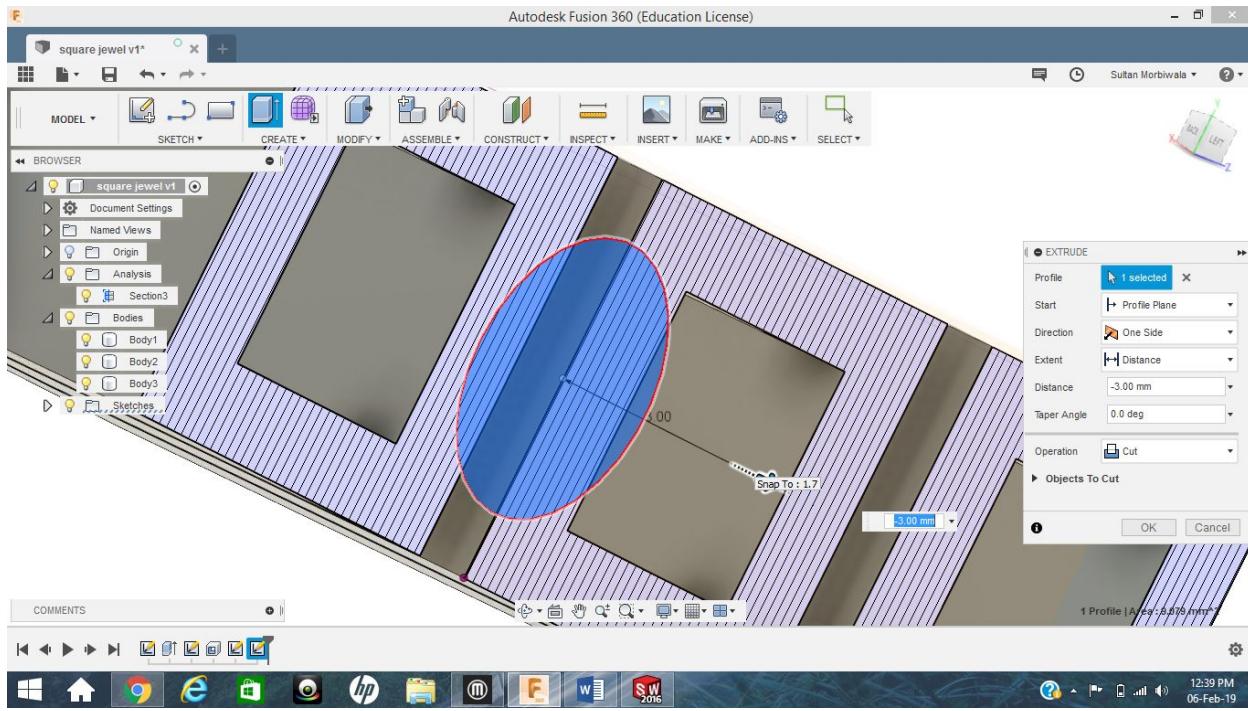


Step 7:- Select the surface below and create a sketch. Draw a circle of 2mm on the midpoint and offset it by 0.7mm. Then Extrude cut the surface by 3mm

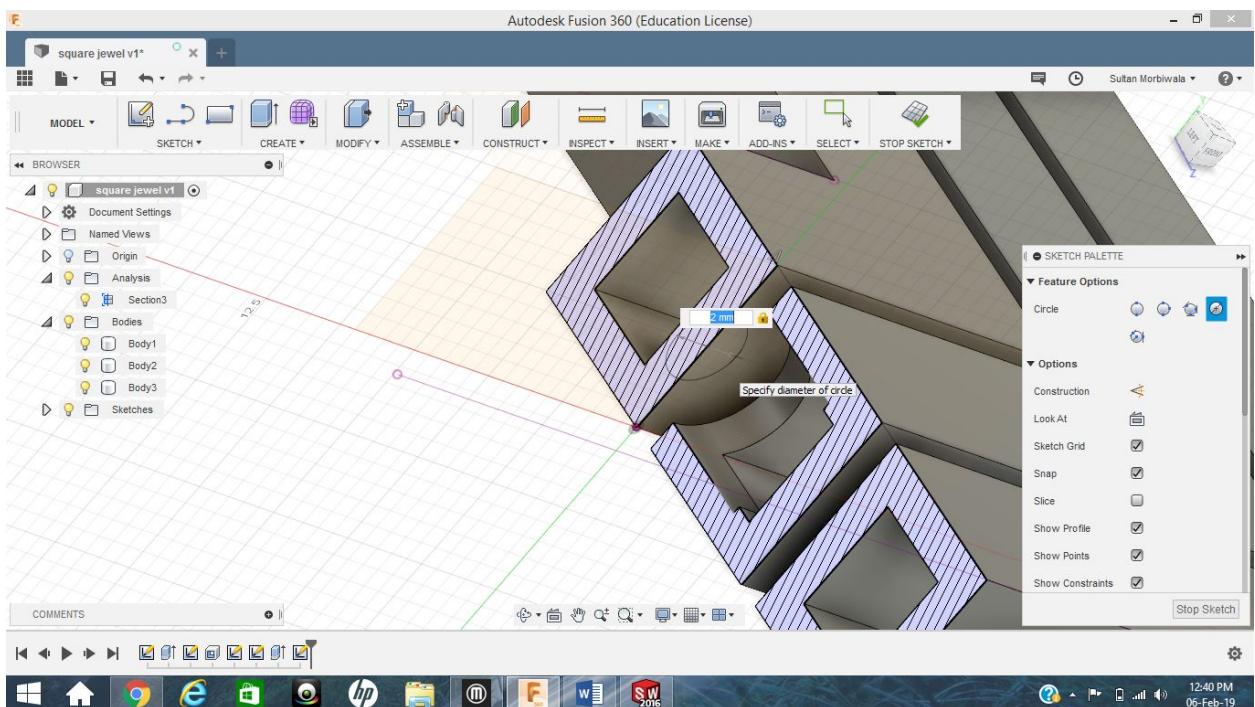
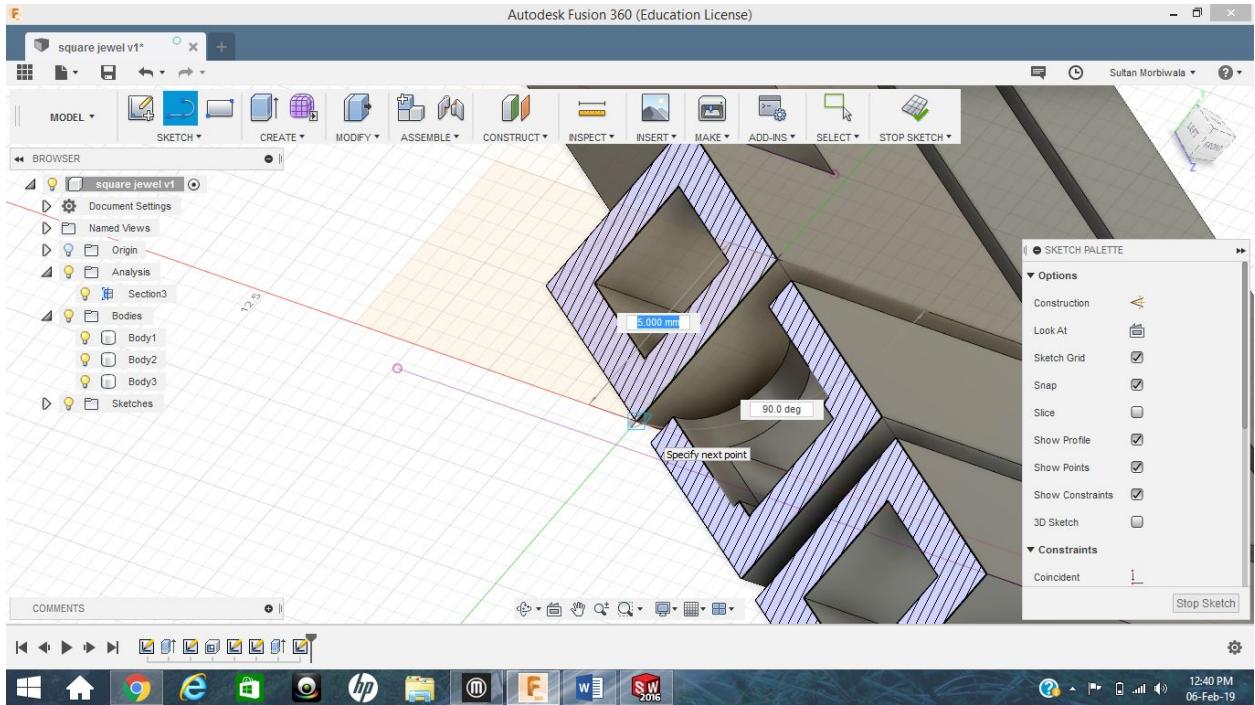


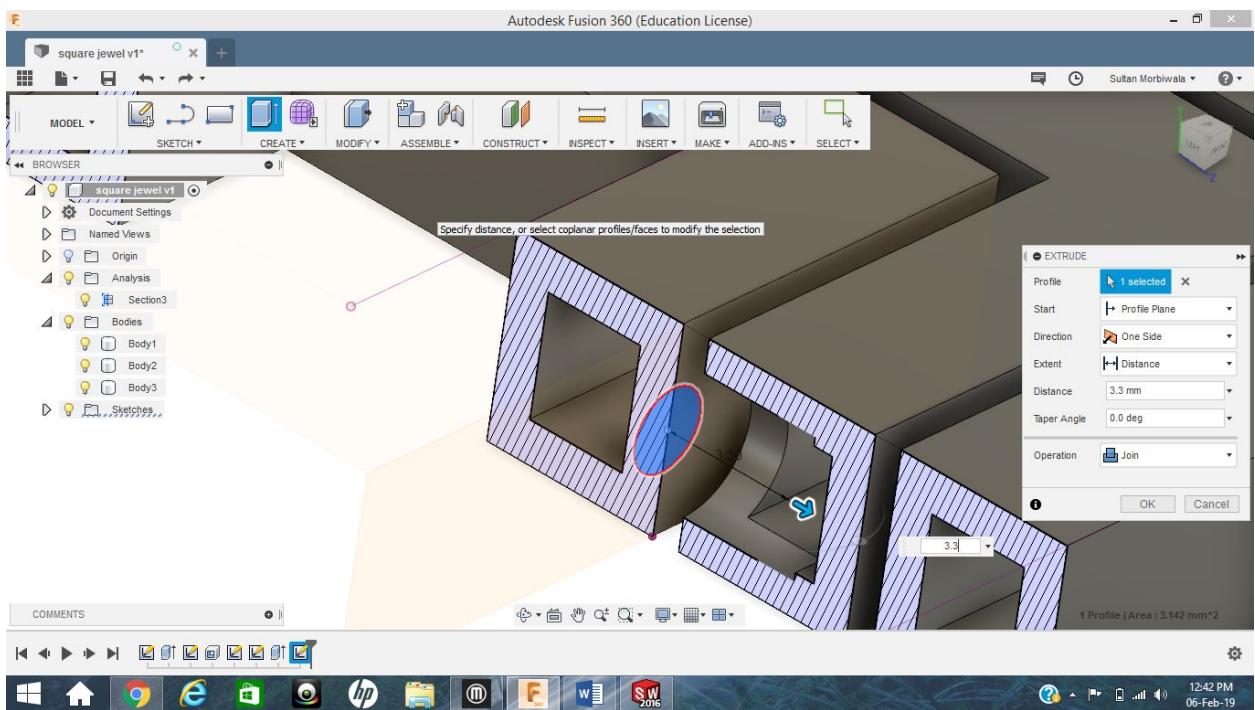
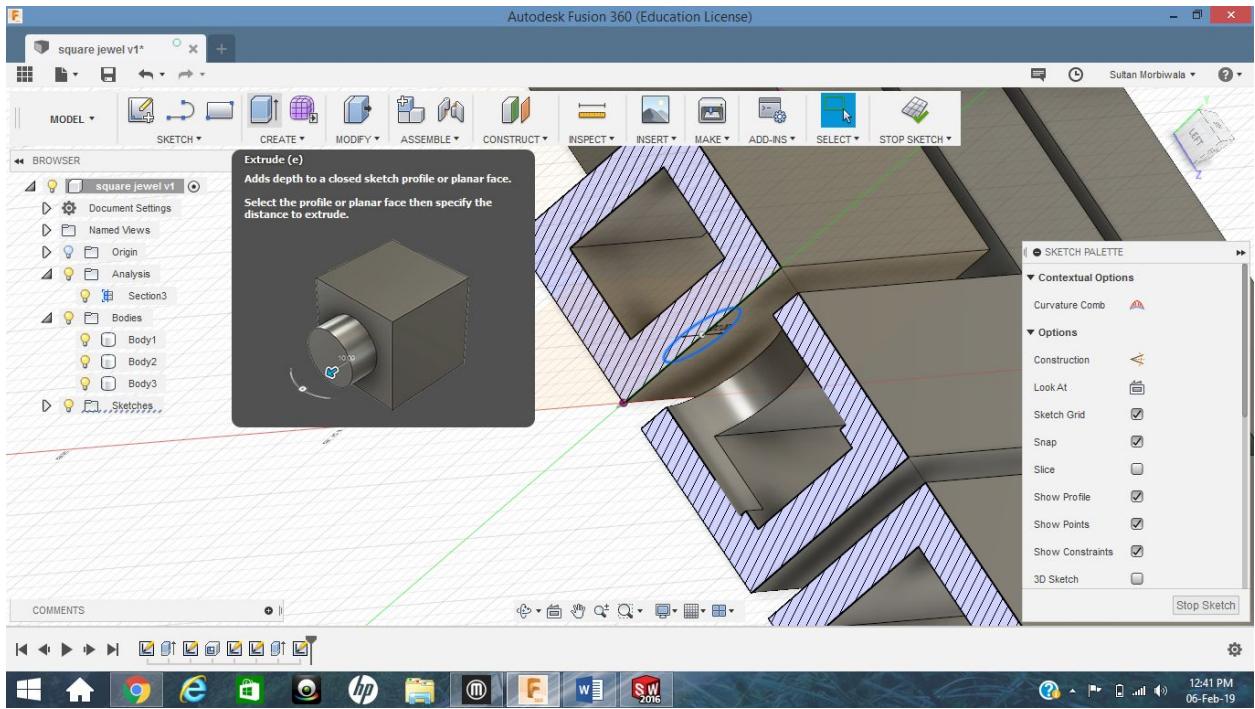






Step 8:- Now draw another circle of 2mm on the opposite surface and extrude it by 3.3mm

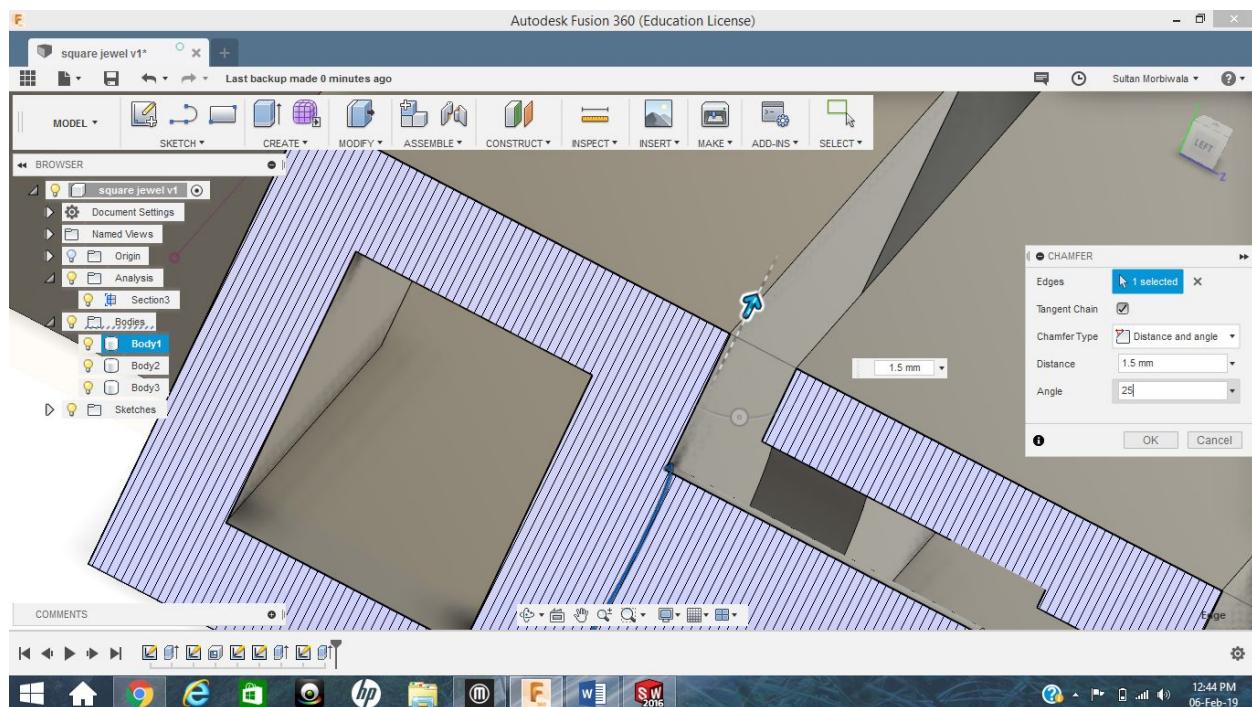
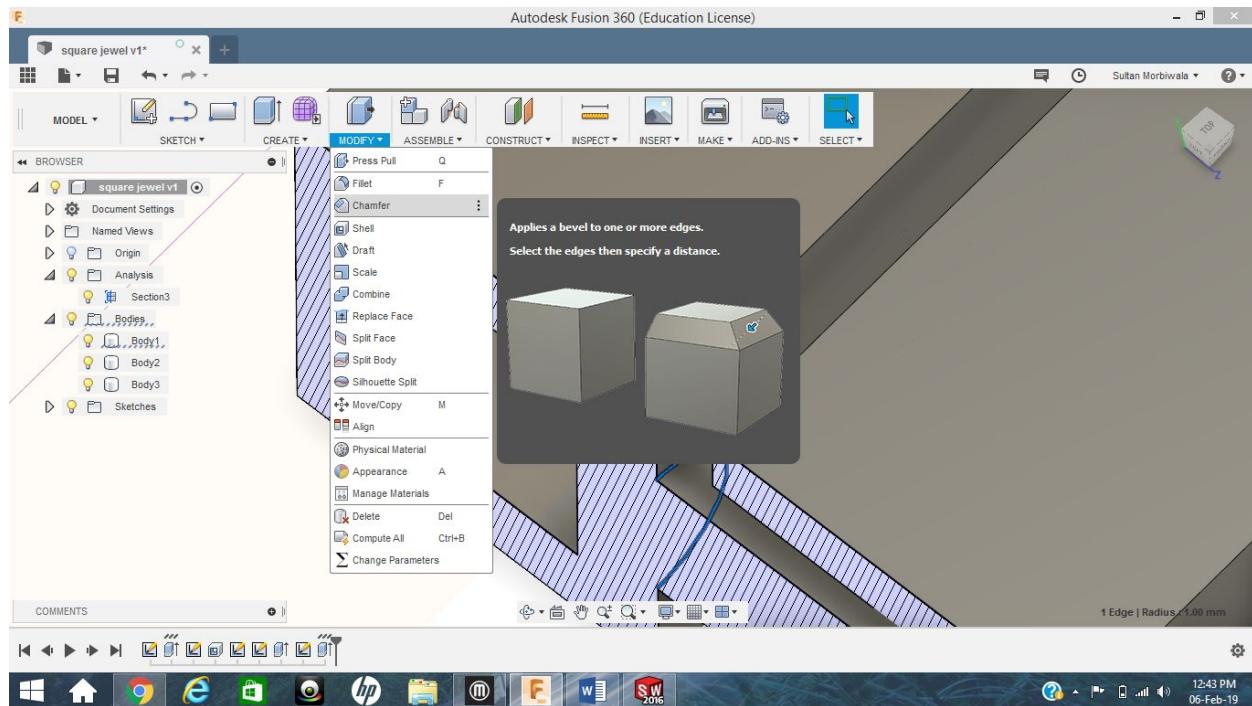




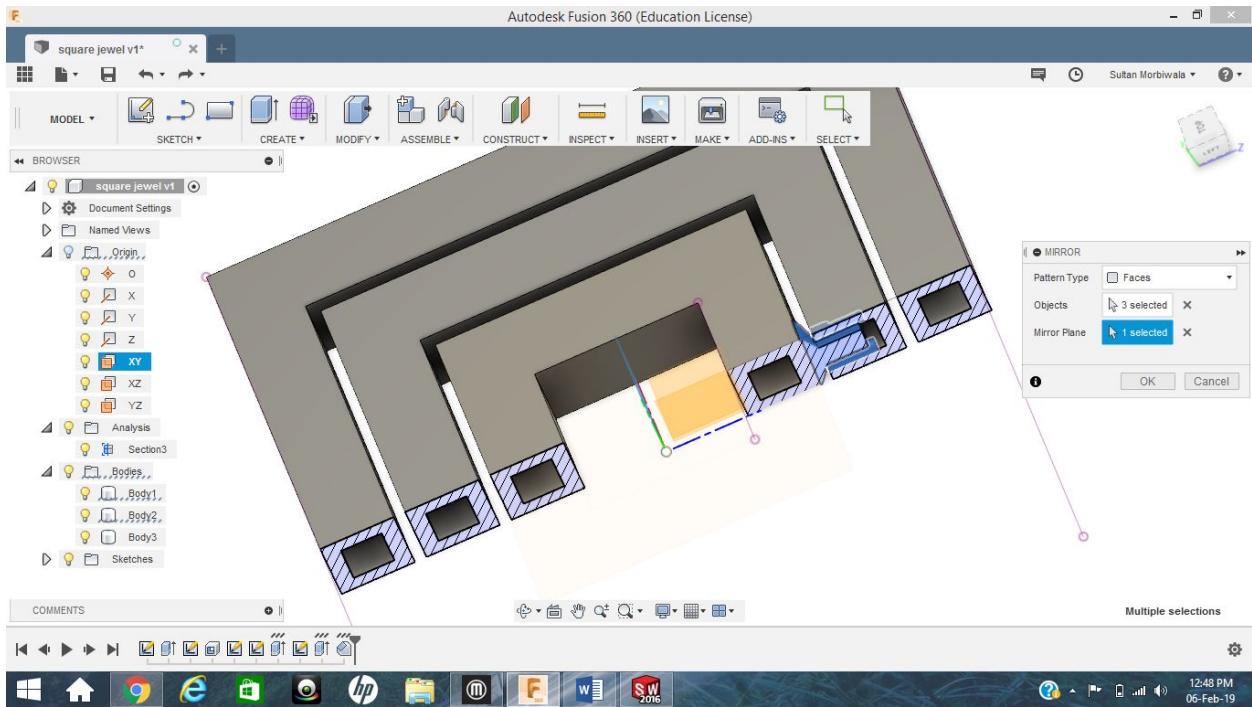
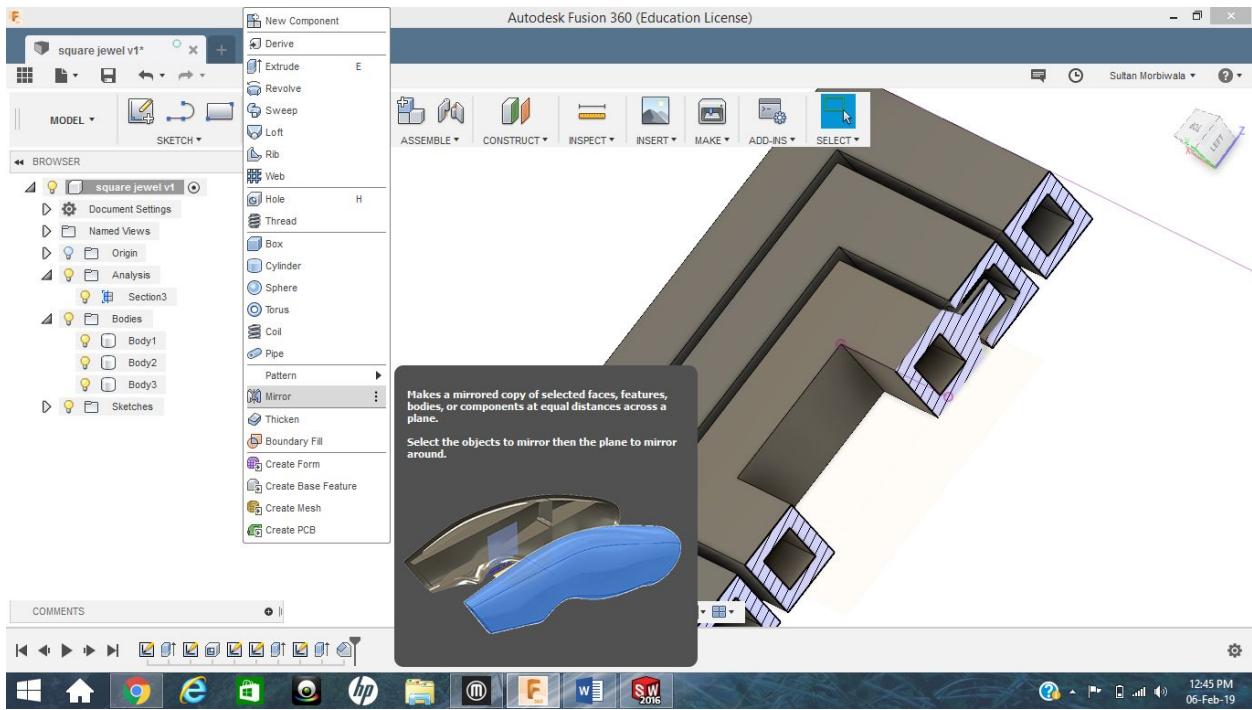
Step 9:- Use the feature of chamfer for the 2mm cylinder and put following value –

Angle = 25 degree

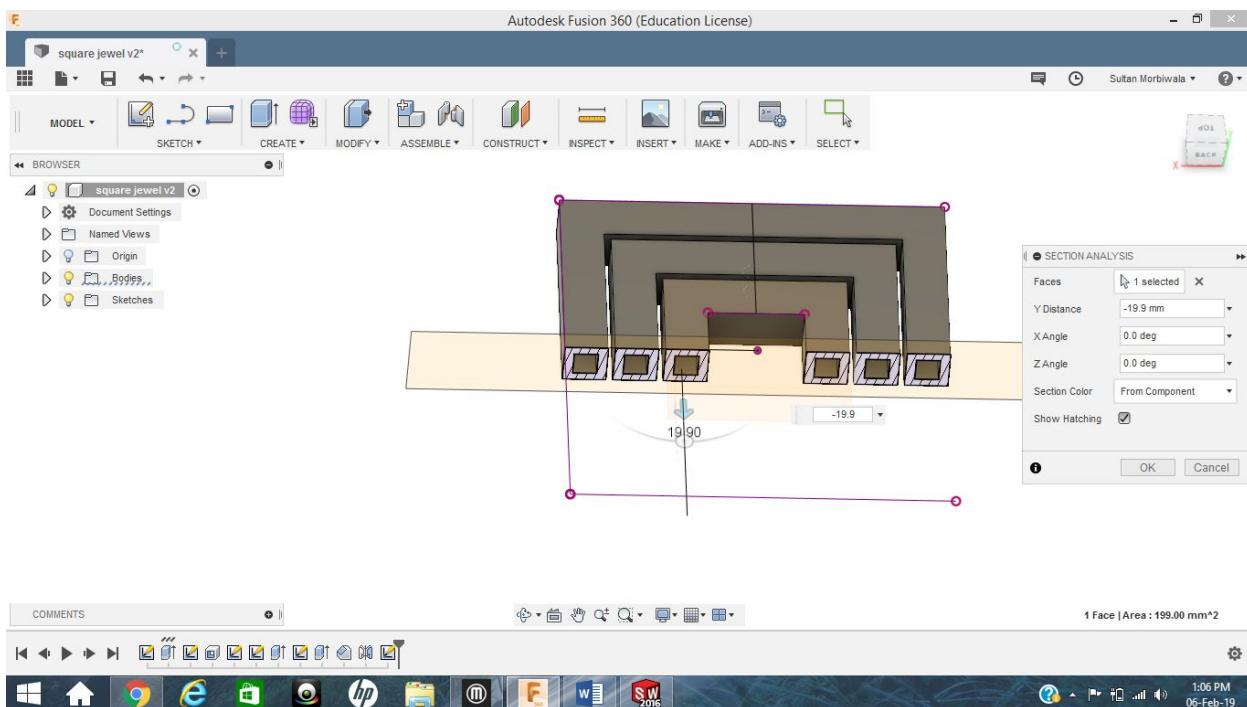
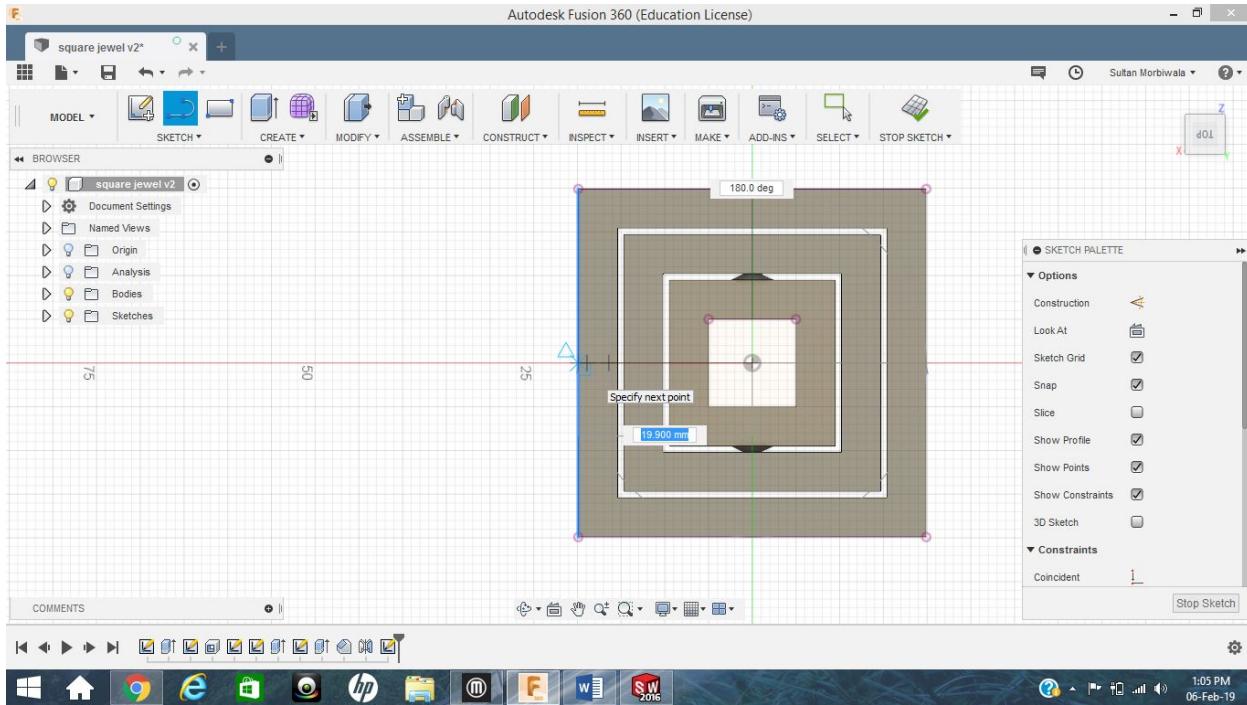
Length = 1.5mm

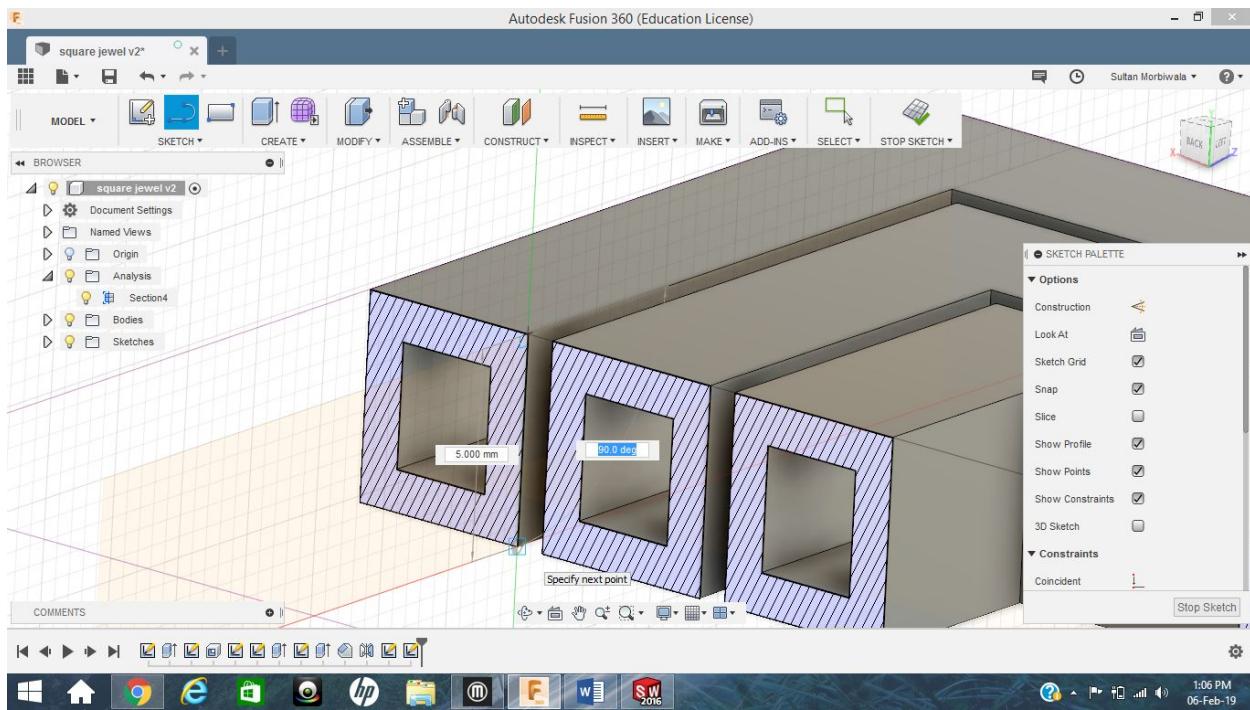
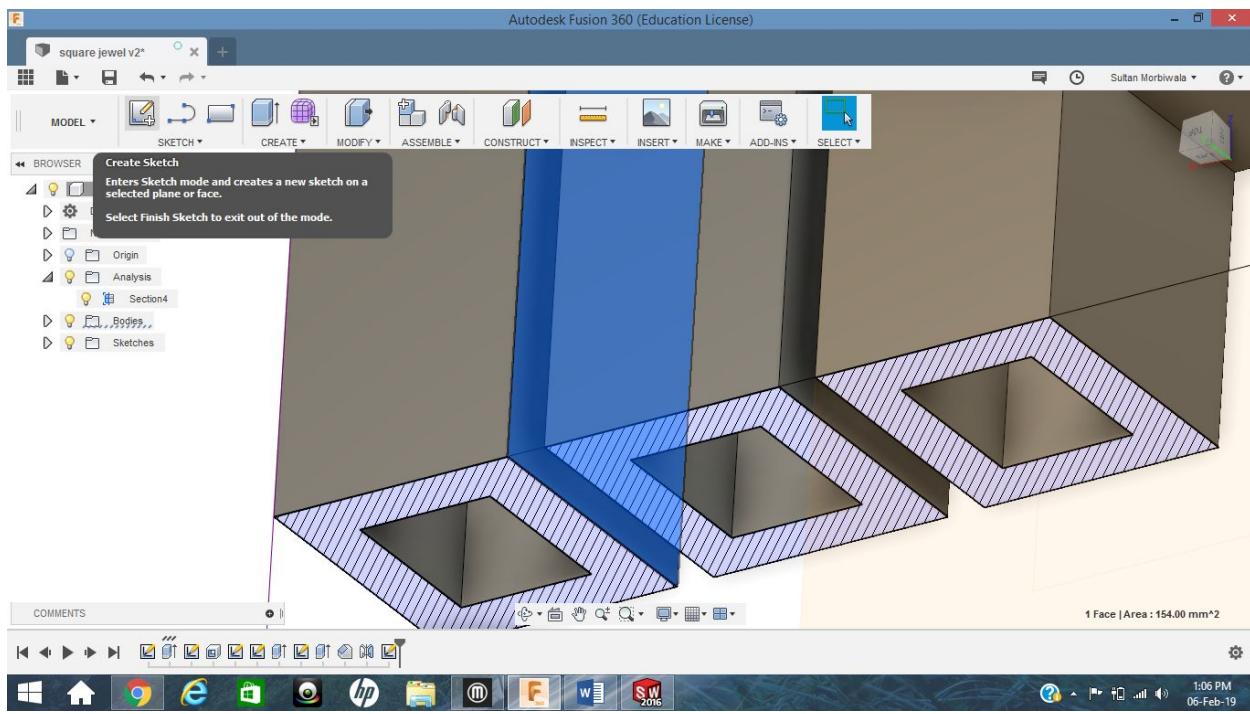


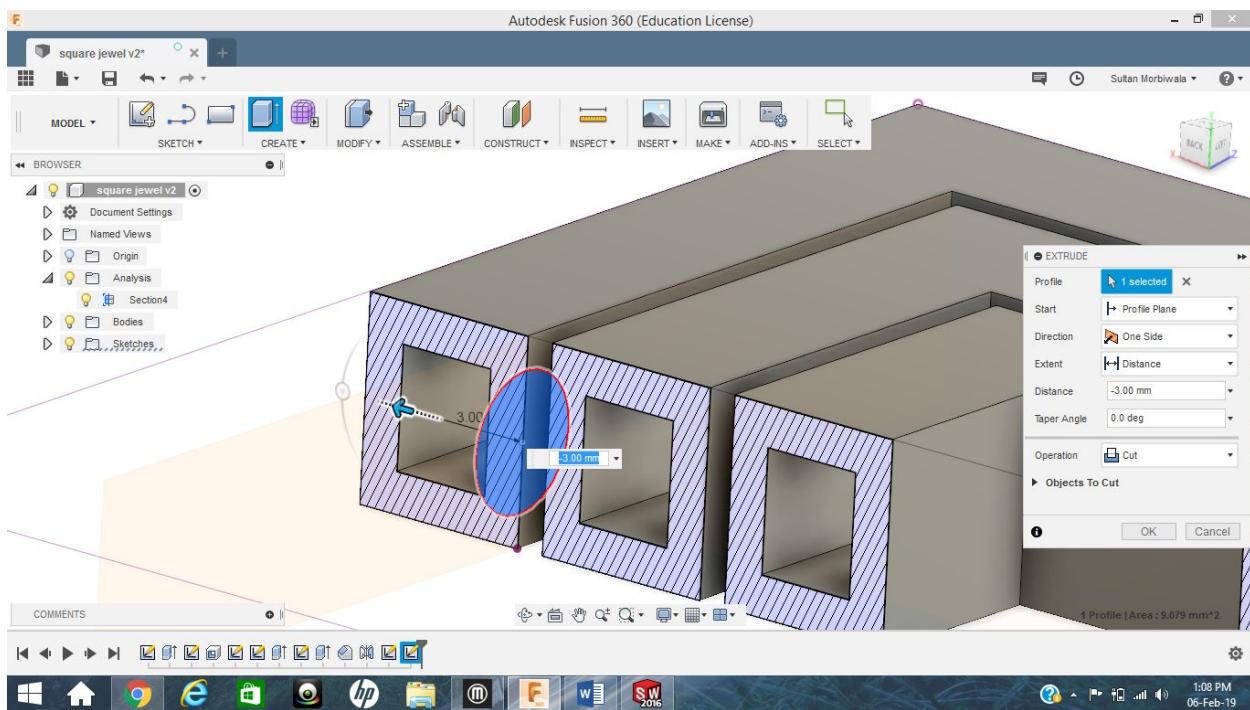
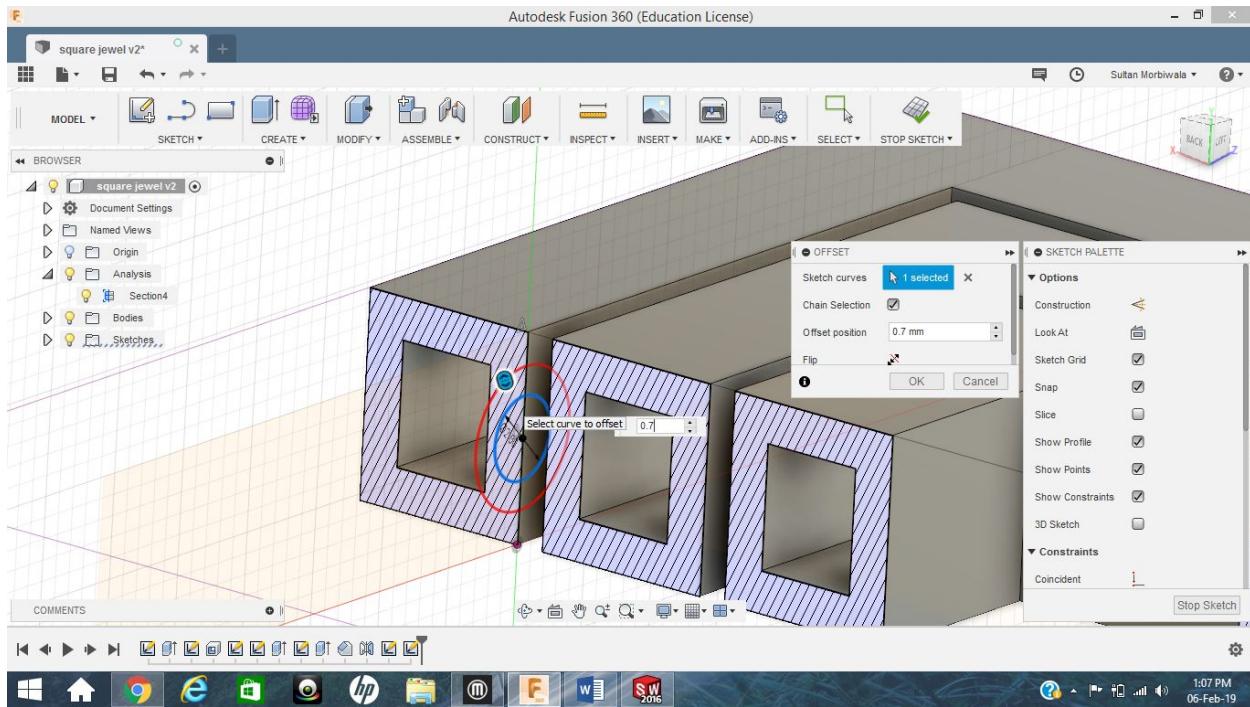
Step 10:- Use the mirror feature to duplicate the 'extrude cut, 2mm cylinder and chamfer' on the XY plane to the opposite side

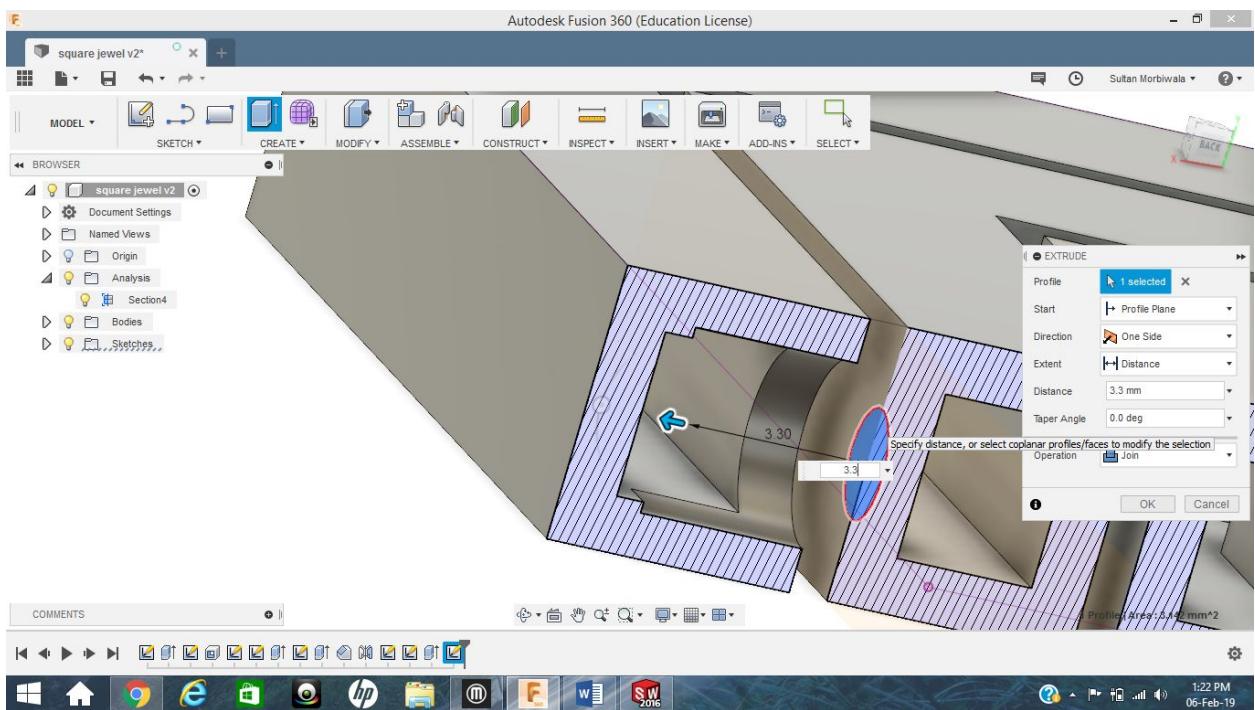
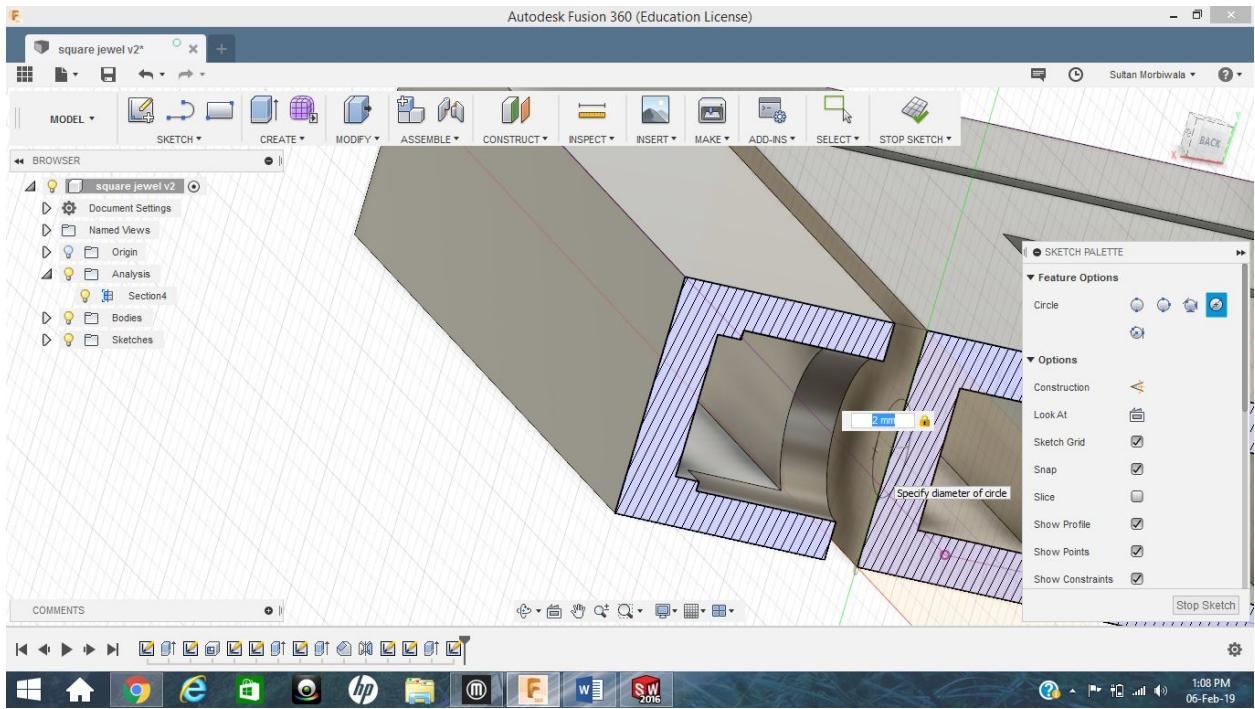


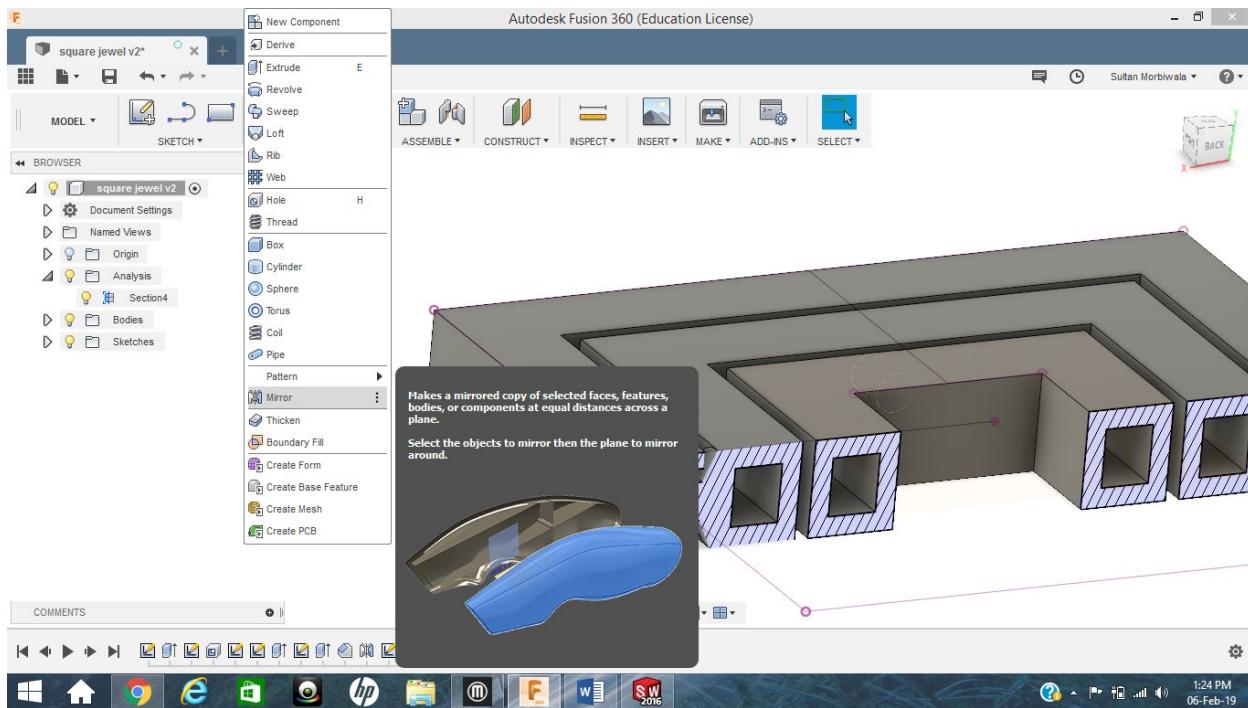
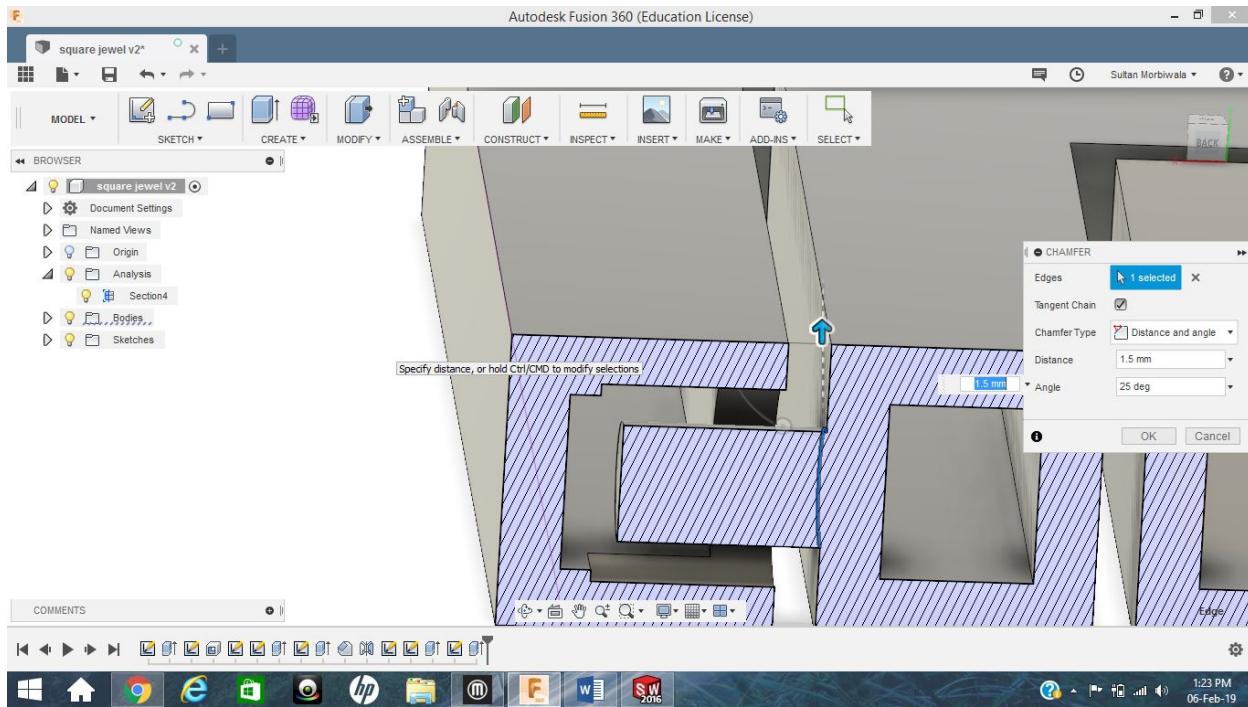
Step 11:- Create another perpendicular line for the section view and duplicate all the process of making lock and cylinder

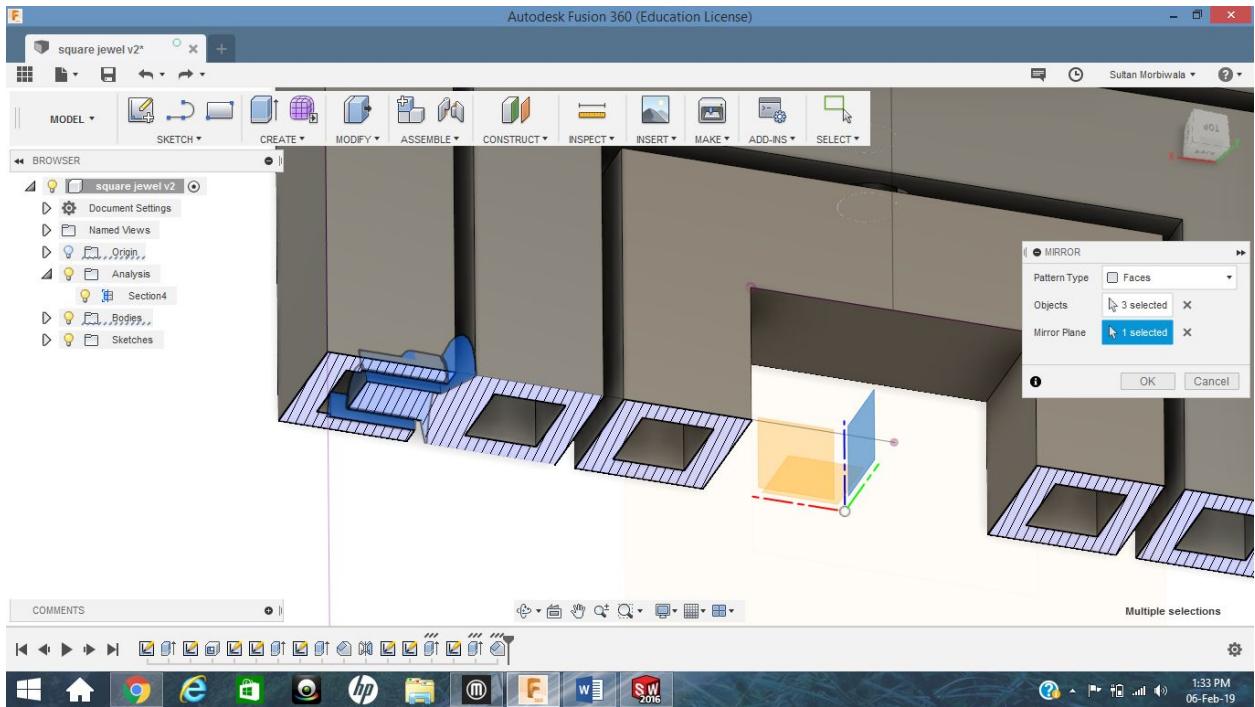




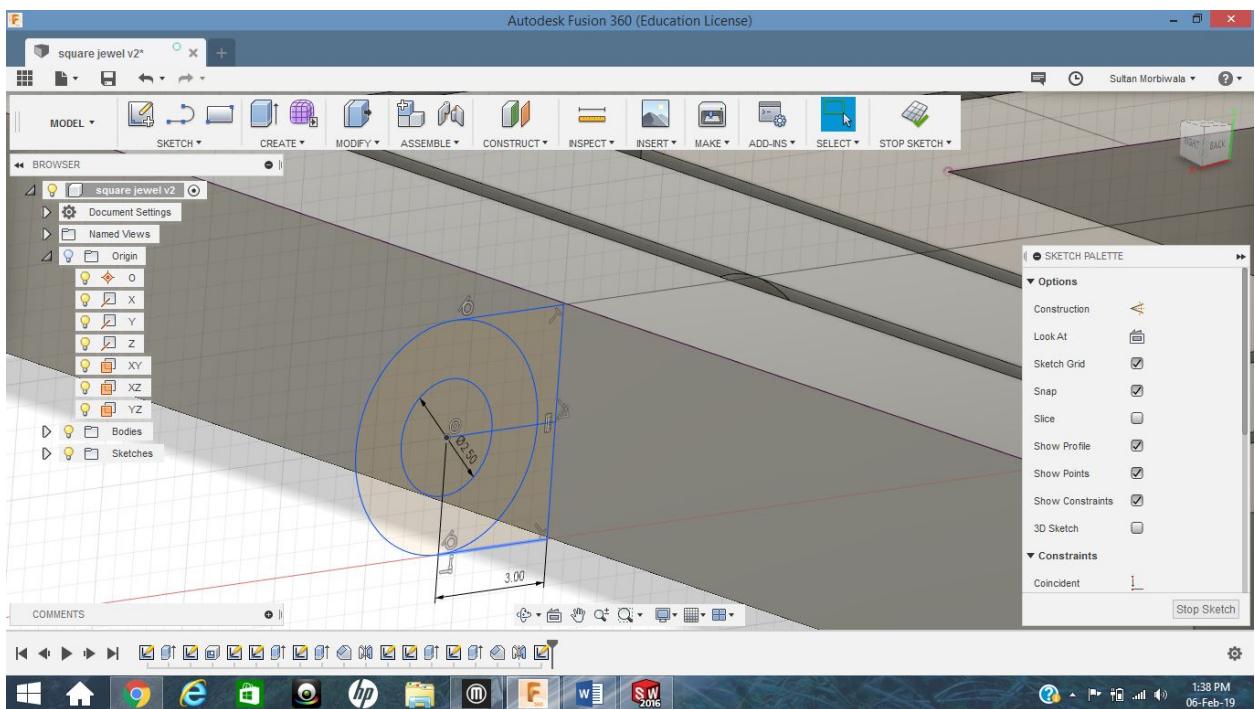


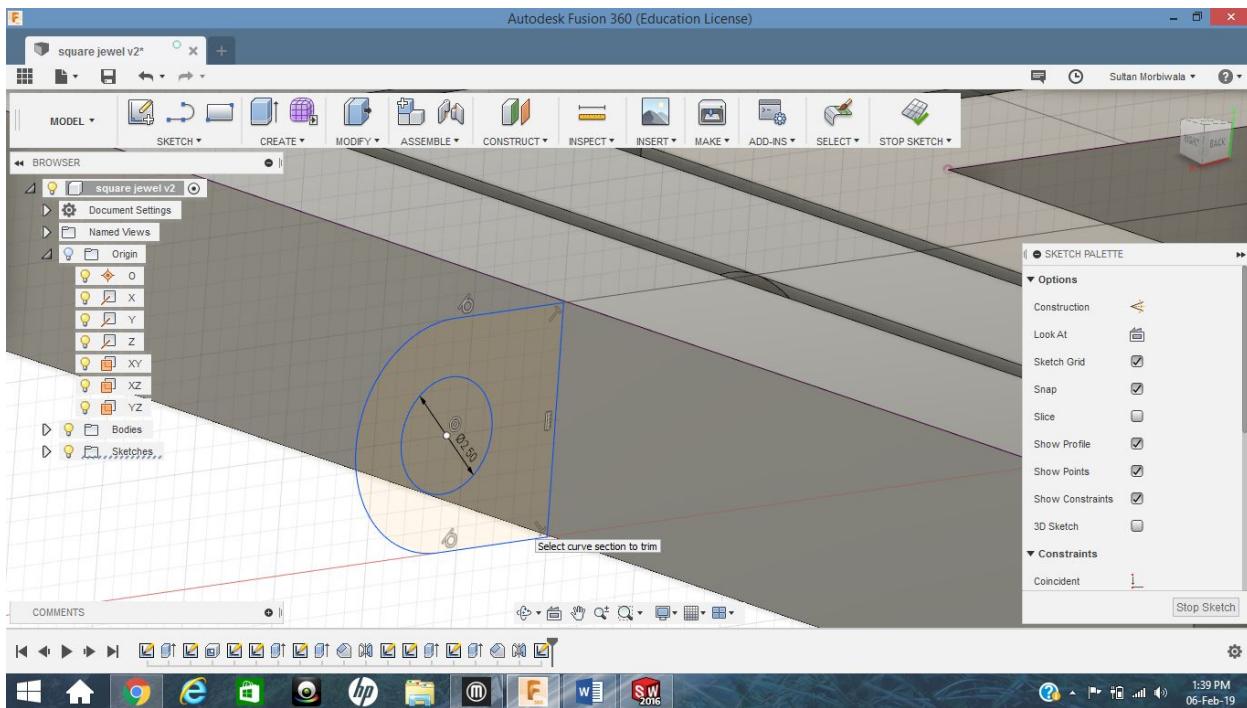
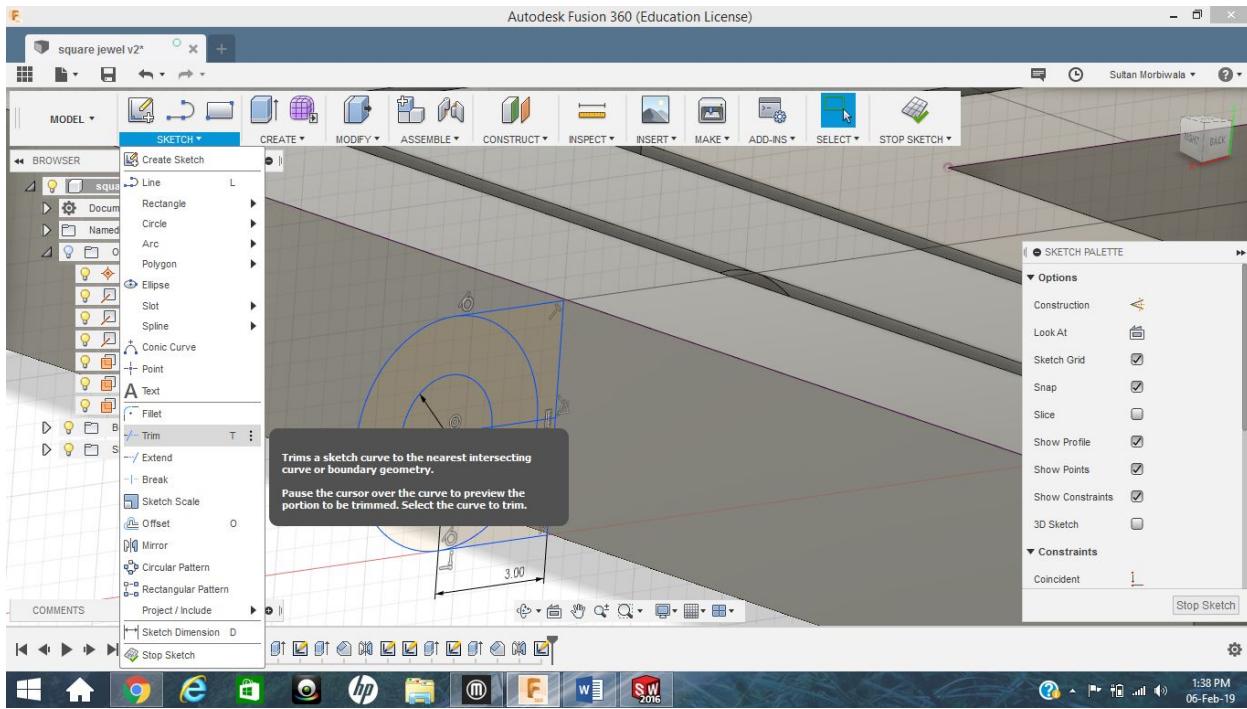


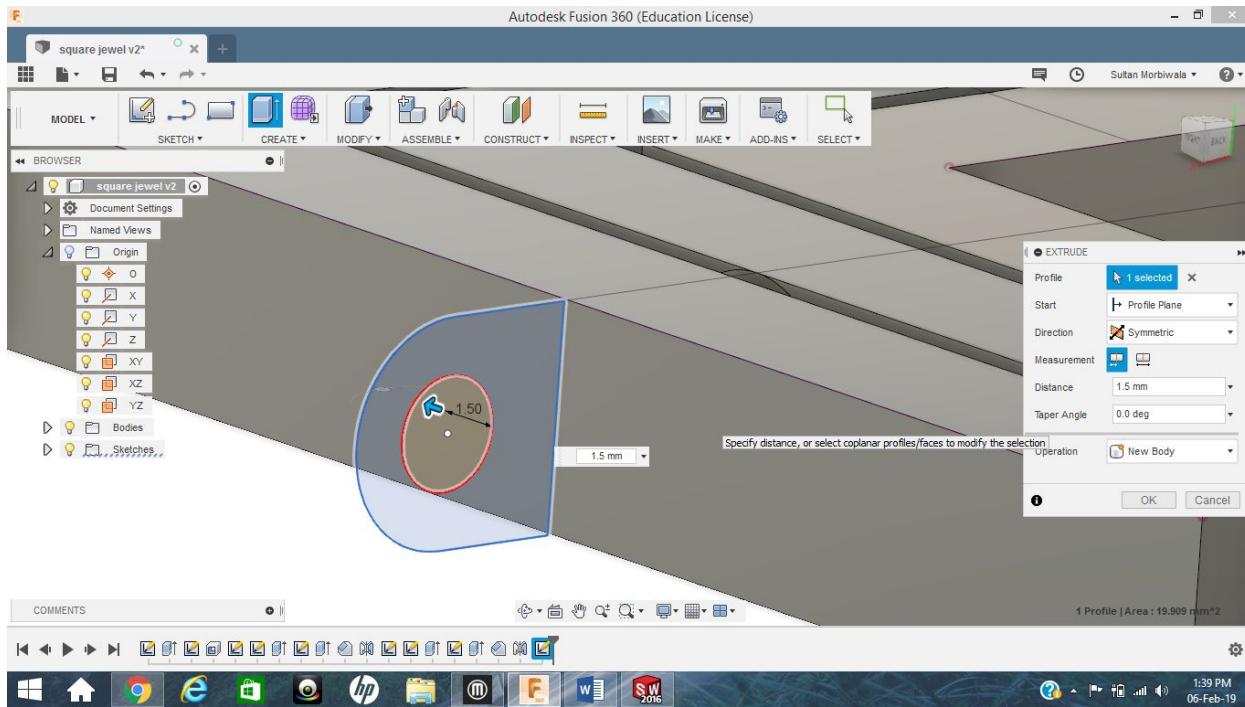




Step 12:- Make a hanger on the last surface with following sketch and use trimmer to eliminate the excess lines. Then extrude it on both direction by 2mm.







Step 13:- Finally select the fillet feature and select all the edges except for the edge on the hanger side. Fillet all the edge by 2mm.

