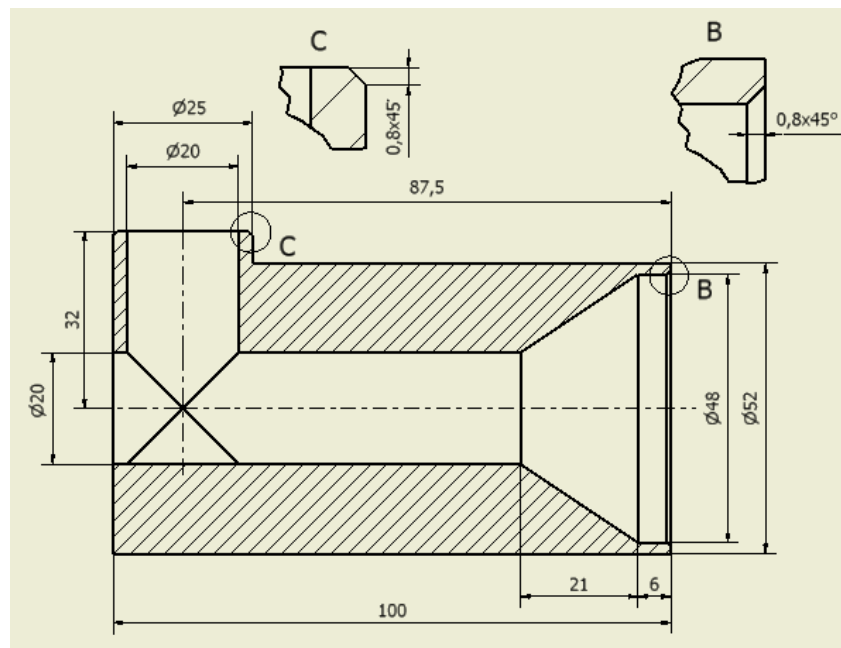
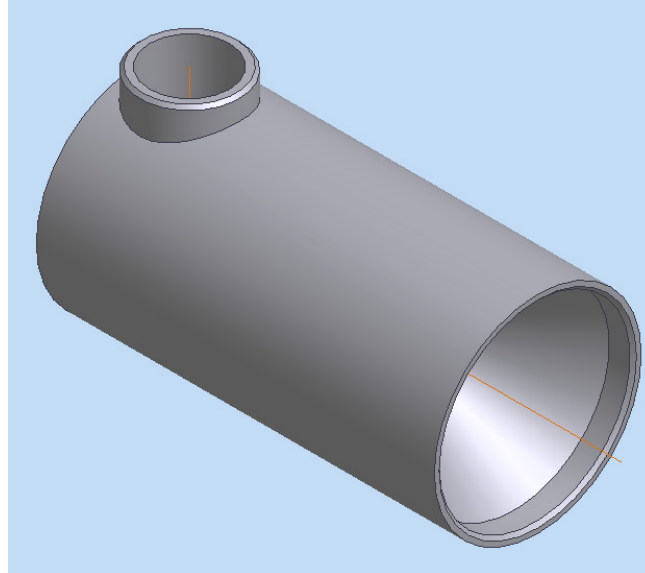


## Part 03- exercise

### Applying part modeling

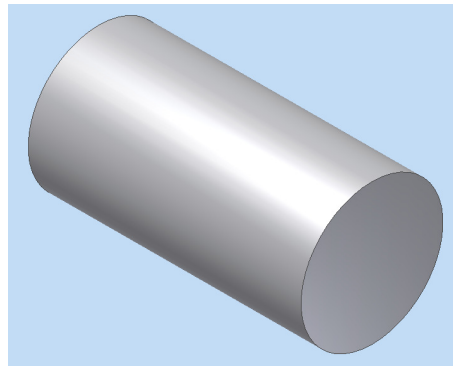
**Assignment:** Prepare the modeling of the part shown in the figure below!  
Preparing the drawing is not included in the assignment!



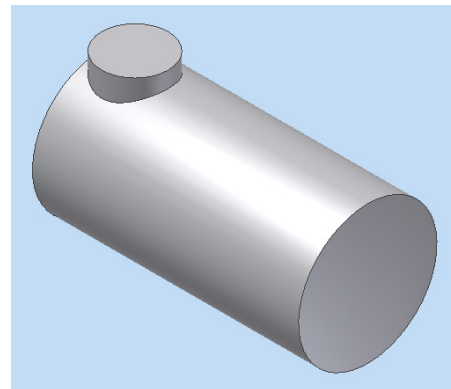
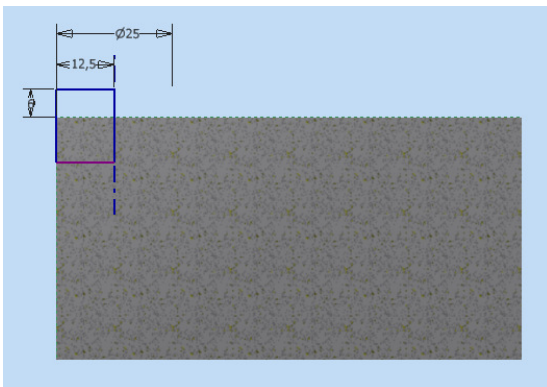
**Assignment aim:** Extending the knowledge regarding the program application through modeling of a simple part.

Sketch preparation, centerline, applying constructing line, hiding details of the part, using basic geometric elements, rotation, chamfering.

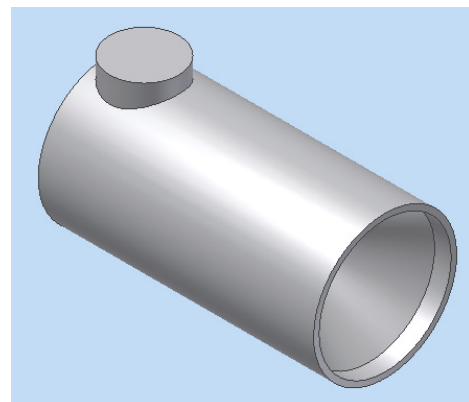
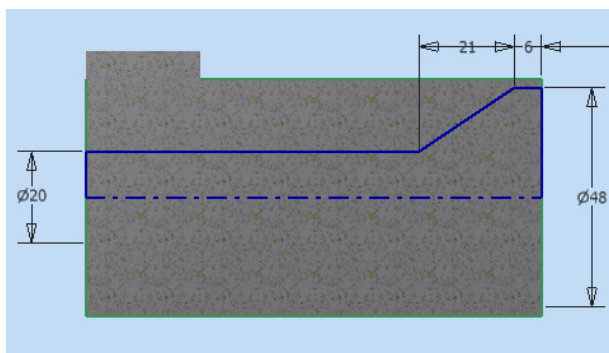
- 1) Start a new problem, prepare the basic adjustments considering the shape and dimensions of the part to be created.
- 2) The basic form feature (diameter 52 mm x 100 mm cylinder) to be created by rotation around the applied centerline. Utilize the opportunity provided by the automatic geometric constraint. Care should be taken to assure a firm sketch (applying fixed constraint).



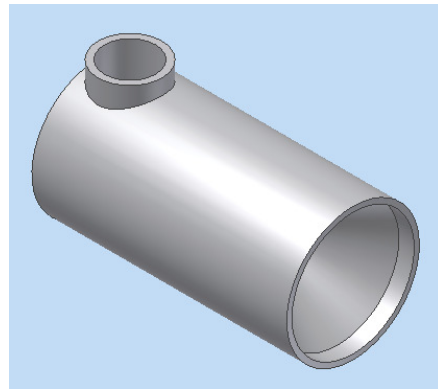
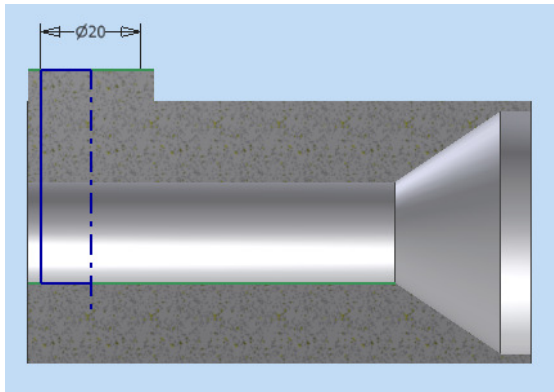
- 3) The connecting small cylinder is created by **rotation**. Let the sketch plane be vertical, containing the centerline. For preparing the sketch the covered parts should be hidden. The geometric projection to the sketch plane should be used.



- 4) Create the hole in the housing by **rotation**. The geometric projection to the sketch plane should be used. The perpendicularly projected edge midpoint can be applied for drawing the centerline (there is no working axis jet!).



- 5) Create the hole (diameter 20x42) in the housing by **rotation**. The geometric projection to the sketch plane should be used. The perpendicularly projected edge midpoint can be applied for drawing the centerline (there is no working axis jet!).



6) Create the form features of the two chamfering (0,8x45°).

