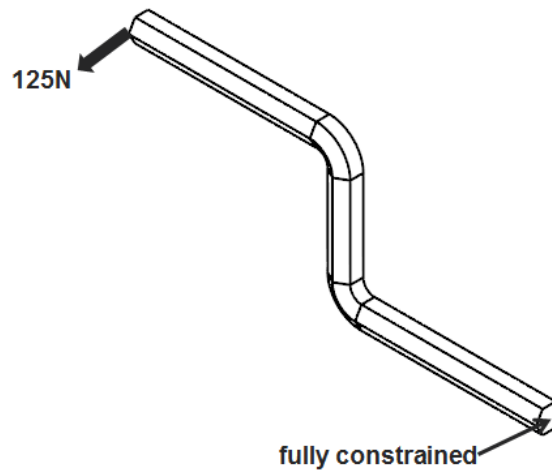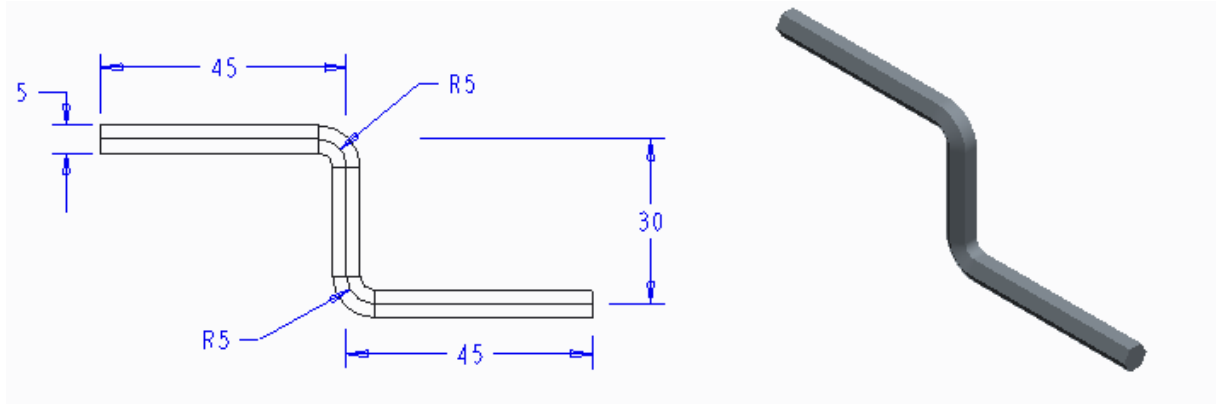# Homework 07: Finite Element Analysis

For this assignment, you are required to create a hex key and perform finite element analysis on it based on the settings specified below. Perform an FEA analysis using multi-pass adaptive method with 5% tolerance on this part using the following conditions and **determine the maximum von Mises stress** in the model:

- fully constrained the key at the right end surface,
- apply a lateral load of 125N at the left end surface, and
- use STEEL as the material for this model and all dimensions are in mm.

The deadline for this lab is **May 15 Mon 11:59 PM**.

Please include the following items for this model in a **single PDF or Word file**:

- analysis summary or rpt file,
- fringe plot of von Mises stress, and
- convergence plots of strain energy & max. von Mises stress showing convergence in your FEA solution.

Submit this PDF or Word file together with the model (.prt) file to Canvas.