

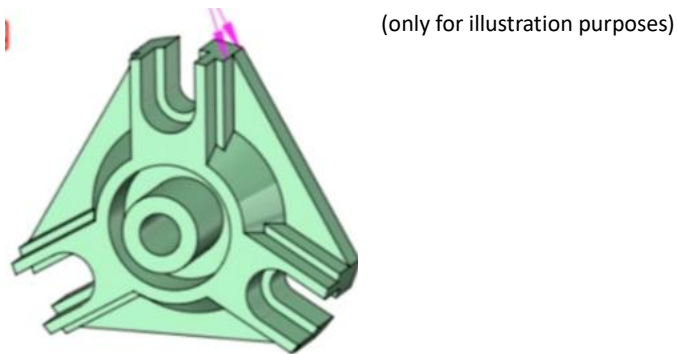
AutoZ – Task for Mechanical Domain

(Use Fusion 360 or SolidWorks for task)

- **1st year** have to complete minimum Task 1 and 2. And if you can complete more, then it will give you an advantage in the recruitment.
- **2nd year** have to complete all the 5 tasks.

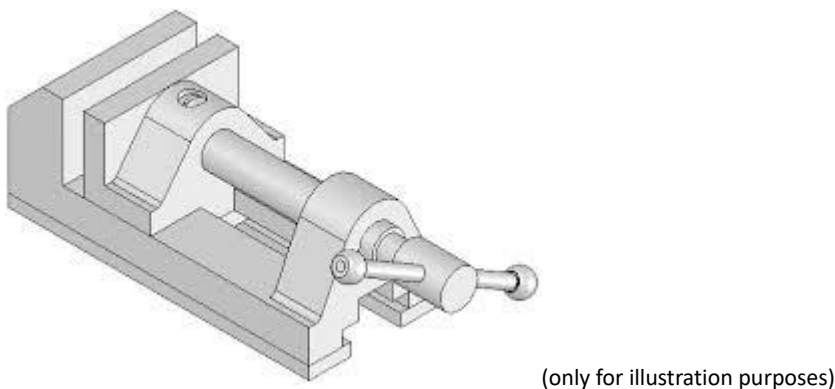
Task 1: Design the solid block given below.

Resource-[Machine Drawing of Task 1](#)



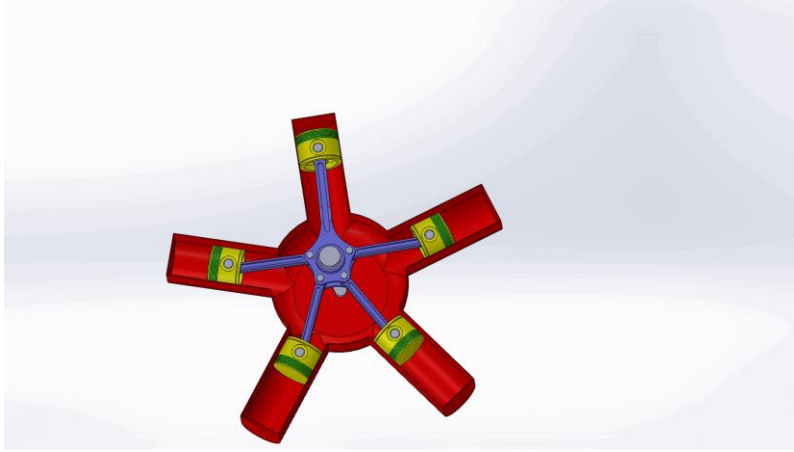
Task 2: Design and Assemble a Bench Vise according to the given machine drawing.

Resource-[Machine Drawing of Task 2](#)



Task 3: Design and assemble the given Radial Engine with proper motion joints, Drive links and Joints limits.

Resource- [Machine Drawing for Task 3](#)



(the final outcome should look and work like this)

Task 4: Simulate a cantilever beam of dimensions 1500 mm × 80 mm × 80 mm bearing a load of 1.5kN on one end with a material of

- 1) carbon steel
- 2) stainless steel

find the maximum deflection and principal stress in each case.

Task 5: Perform the Tensile test on the given specimen.

Resource- [Machine Drawing for Task 5](#)

