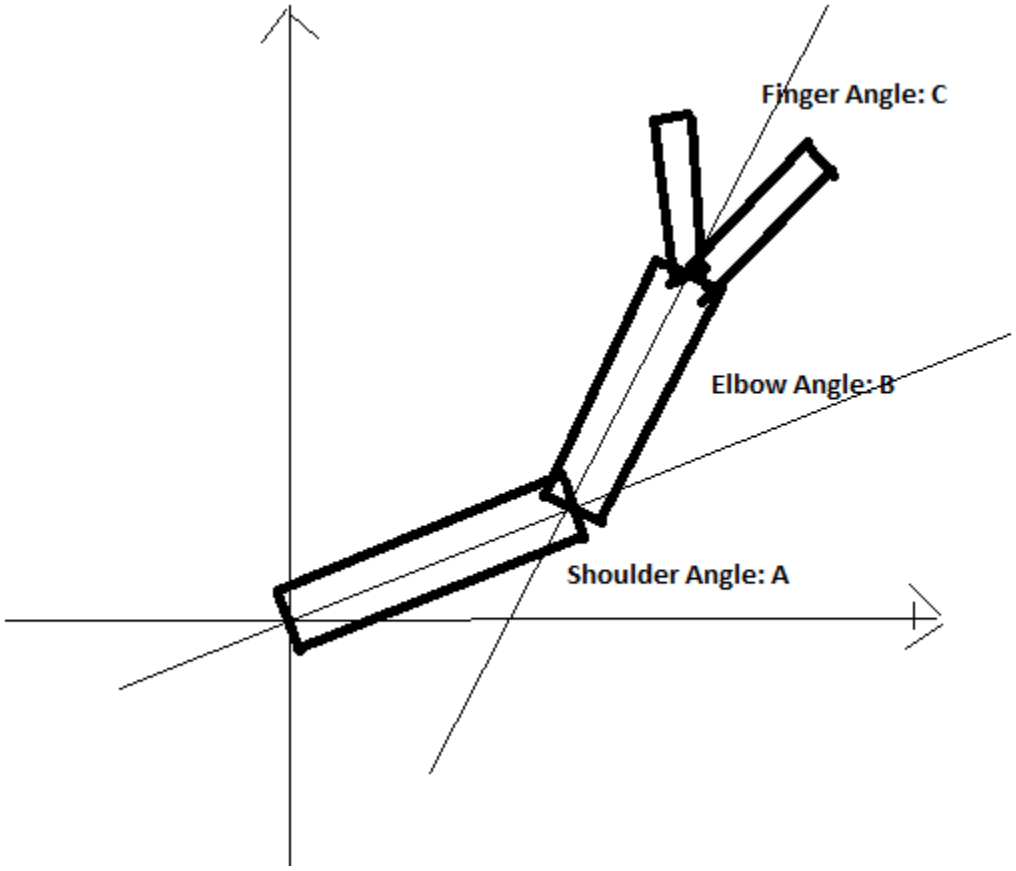
Homework: Transformation

We have a unit cube (side size = 1) in the model coordinates centered at the original.

We are going to draw the following simple robot, with a front arm, a lower arm, and two fingers, which are all transformed from the unit cube.



As in this picture, the upper arm and lower arm sizes are 2x0.4x0.4.

Finger size is 1x0.2x0.2

We only consider about the rotation around z-axis. Upper arm rotated an angle A. Lower arm rotated an angle B related upper arm. The fingers open an angle C.

Your work is to figure out how to calculate the transformation matrices for the two arms and two fingers.

Write a report and submit to canvas.