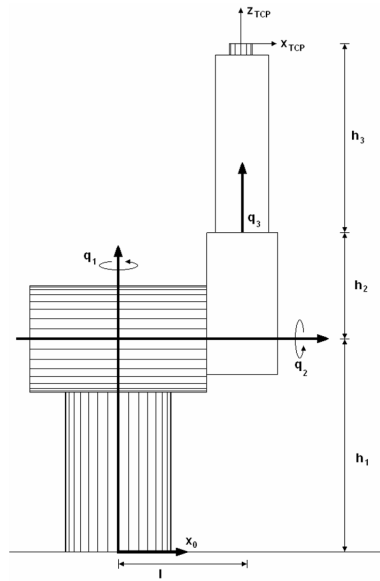


# Exercise

## Forward Transformation



**Task 1.** Given is the robot shown in the figure above, the so called simplified Stanford manipulator. The mechanism consists of two revolute joints  $q_1$  and  $q_2$  as well as a prismatic axis  $q_3$ .

- Select Denavit-Hartenberg-compliant coordinate systems for each axis.
- Determine the Denavit-Hartenberg parameters of the manipulator.
- Determine the forward transformation of the manipulator.