Problem 1: Establish orthonormal link coordinate systems $(x_i, y_i, z_i)$ for $i=1, 2, \ldots, 6$ for the PUMA 260 robot arm shown in the figure below and complete the table. (30 points)
Problem 2: A two degree-of-freedom manipulator is shown in the figure below. Given that the length of each link is 1 m, establish its link coordinate frames and find $T_0^1, T_1^2$ and the kinematics matrix. Find the inverse kinematics solution for this manipulator (i.e., assuming you know the position/orientation of the robot tip, solve the joint variables). (40+30 points)