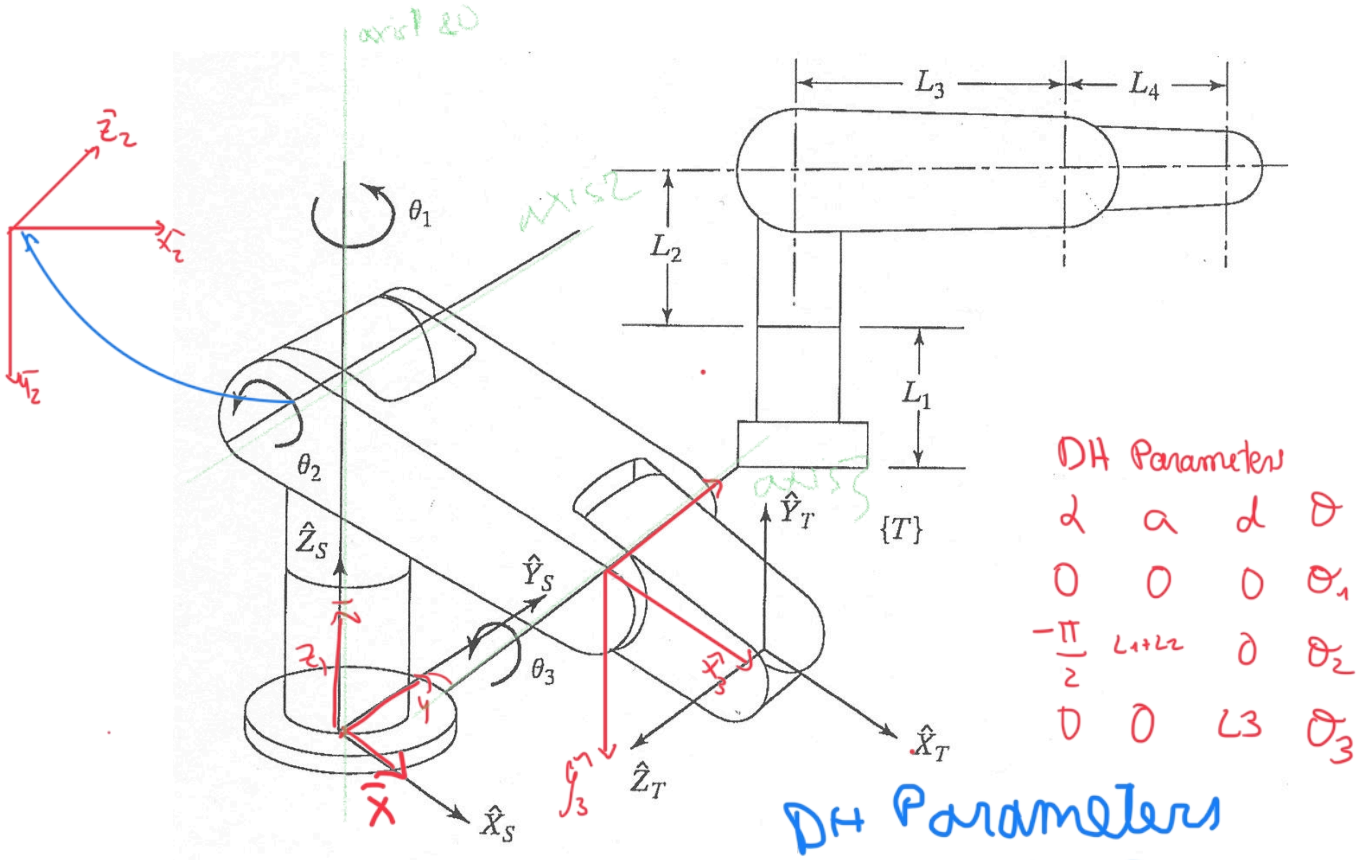
Forward Kinematic exercise

Given the following 3R robot



DH Parameters

α	a	d	θ
0	0	0	θ_1
$-\frac{\pi}{2}$	L_1+L_2	0	θ_2
0	0	L_3	θ_3

DH Parameters

0	0	0	θ_1
$-\pi/2$	7	0	θ_2
0	0	2	θ_3

Where L_1=4, L_2=3, L_3=2, and L_4=1.

Write a Live script file (.mlx)

1) Draw on top of the figure de necessary frame
2) Derive the DH parameters table and the neighboring homogeneous transformation matrices ${}^{i-1}T_i$, for i=1,2,3, as functions of the joint angles
3) Implement the forward kinematics, that is ${}^{T}T_s$,
4) Calculate the result for the following joint angles: (0, 0, 0), (0, π/2, 0), and (0, π/2, π/6).