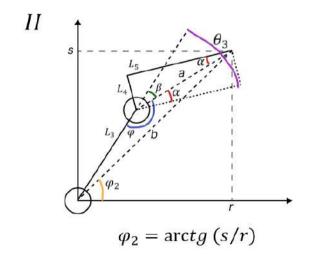
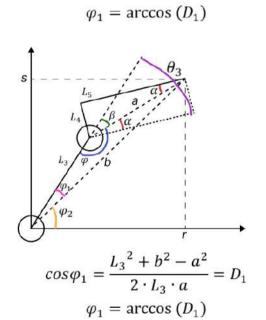
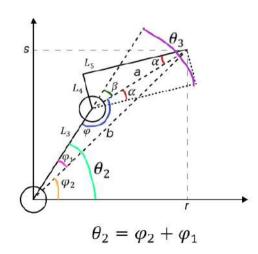
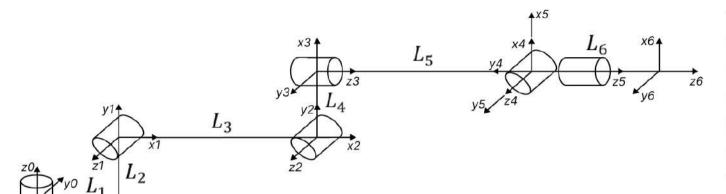


$$\theta_2 = \varphi_2 - \varphi_1$$









n	θ	α	r	d
1	θ	90°	L1	L2
2	θ	0°	L3	0
3	θ+90°	90°	L4	0
4	8	270°	0	L5
5	θ	90°	0	0
6	θ	0°	0	L6

$$R_6^3 = \begin{bmatrix} \cos\theta_4\cos\theta_5\cos\theta_6 - \sin\theta_4\sin\theta_6 & -\cos\theta_4\cos\theta_5\sin\theta_6 - \sin\theta_4\cos\theta_6 \\ \sin\theta_4\cos\theta_5\cos\theta_6 + \cos\theta_4\sin\theta_6 & -\sin\theta_4\cos\theta_5\sin\theta_6 + \cos\theta_4\cos\theta_6 \\ -\sin\theta_5\cos\theta_6 & \sin\theta_5\sin\theta_6 \end{bmatrix}$$

$$-cos\theta_4cos\theta_5sin\theta_6 - sin\theta_4cos\theta_6$$
 $cos\theta_4cos\theta_5sin\theta_6 + cos\theta_4cos\theta_6$ $sin\theta_5sin\theta_6$

$$egin{array}{c} cos heta_4 sin heta_5 \ sin heta_4 sin heta_5 \ cos heta_5 \end{array}
brace$$

$$\theta_4 = \arctan(R_6^3(2.3)/R_6^3(1.3))$$

$$R = R_3^0 \cdot R_6^3 \to R_6^3 = R \cdot (R_3^0)^T$$

$$\theta_5 = \arccos\left(R_6^3(3.3)\right)$$

$$\theta_6 = \arctan(-R_6^3(3.2)/R_6^3(3.1))$$