i	α_{i-1}	a_{i-1}	θ_i	d_i
1	0°	0	θ_1	0
2	90°	0	$\theta_2 + 90^\circ$	0
3	0°	ℓ_1	θ_3	0
4	0°	ℓ_2	θ_4	ℓ_3
5	-90°	0	θ_5	ℓ_4
6	90°	0	θ_6	0

$$
{}^0T_1 = \begin{pmatrix} \cos(\theta_1) & -\sin(\theta_1) & 0 & 0 \\ \sin(\theta_1) & \cos(\theta_1) & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}
$$

$$
{}^1T_2 = \begin{pmatrix} \cos(\theta_2 + 90^\circ) & -\sin(\theta_2 + 90^\circ) & 0 & 0 \\ \sin(\theta_2 + 90^\circ)\cos(90^\circ) & \cos(\theta_2 + 90^\circ)\cos(90^\circ) & -\sin(90^\circ) & 0 \\ \sin(\theta_2 + 90^\circ)\sin(90^\circ) & \cos(\theta_2 + 90^\circ)\sin(90^\circ) & \cos(90^\circ) & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}
$$

$$
= \begin{pmatrix} \cos(\theta_2 + 90^\circ) & -\sin(\theta_2 + 90^\circ) & 0 & 0 \\ \sin(\theta_2 + 90^\circ) \cdot 0 & \cos(\theta_2 + 90^\circ) \cdot 0 & -1 & 0 \\ \sin(\theta_2 + 90^\circ) \cdot 1 & \cos(\theta_2 + 90^\circ) \cdot 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}
$$

$$
= \begin{pmatrix} \cos(\theta_2 + 90^\circ) & -\sin(\theta_2 + 90^\circ) & 0 & 0 \\ 0 & 0 & -1 & 0 \\ \sin(\theta_2 + 90^\circ) & \cos(\theta_2 + 90^\circ) & 0 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}
$$

$$
{}^2T_3 = \begin{pmatrix} \cos(\theta_3) & -\sin(\theta_3) & 0 & \ell_1 \\ \sin(\theta_3) & \cos(\theta_3) & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}
$$

$$
{}^3T_4 = \begin{pmatrix} \cos(\theta_4) & -\sin(\theta_4) & 0 & \ell_2 \\ \sin(\theta_4) & \cos(\theta_4) & 0 & -\sin(0°) \cdot \ell_3 \\ 0 & 0 & 1 & \cos(0°) \cdot \ell_3 \\ 0 & 0 & 0 & 1 \end{pmatrix} = \begin{pmatrix} \cos(\theta_4) & -\sin(\theta_4) & 0 & \ell_2 \\ \sin(\theta_4) & \cos(\theta_4) & 0 & 0 \\ 0 & 0 & 1 & \ell_3 \\ 0 & 0 & 0 & 1 \end{pmatrix}
$$

$$
{}^4T_5 = \begin{pmatrix} \cos(\theta_5) & -\sin(\theta_5) & 0 & 0 \\ \sin(\theta_5)\cos(-90°) & \cos(\theta_5)\cos(-90°) & -\sin(-90°) & -\sin(-90°) \cdot \ell_4 \\ \sin(\theta_5)\sin(-90°) & \cos(\theta_5)\sin(-90°) & \cos(-90°) & \cos(-90°) \cdot \ell_4 \\ 0 & 0 & 0 & 1 \end{pmatrix}
$$

$$
= \begin{pmatrix} \cos(\theta_5) & -\sin(\theta_5) & 0 & 0 \\ \sin(\theta_5) \cdot 0 & \cos(\theta_5) \cdot 0 & 1 & 1 \cdot \ell_4 \\ \sin(\theta_5) \cdot -1 & \cos(\theta_5) \cdot -1 & 0 & 0 \cdot \ell_4 \\ 0 & 0 & 0 & 1 \end{pmatrix} = \begin{pmatrix} \cos(\theta_5) & -\sin(\theta_5) & 0 & 0 \\ 0 & 0 & 1 & \ell_4 \\ -\sin(\theta_5) & -\cos(\theta_5) & 0 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}
$$

$$
{}^5T_6 = \begin{pmatrix} \cos(\theta_6) & -\sin(\theta_6) & 0 & 0 \\ \sin(\theta_6)\cos(90°) & \cos(\theta_6)\cos(90°) & -\sin(90°) & 0 \\ \sin(\theta_6)\sin(90°) & \cos(\theta_6)\sin(90°) & \cos(90°) & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}
$$

$$
= \begin{pmatrix} \cos(\theta_6) & -\sin(\theta_6) & 0 & 0 \\ \sin(\theta_6) \cdot 0 & \cos(\theta_6) \cdot 0 & -1 & 0 \\ \sin(\theta_6) \cdot 1 & \cos(\theta_6) \cdot 1 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix} = \begin{pmatrix} \cos(\theta_6) & -\sin(\theta_6) & 0 & 0 \\ 0 & 0 & -1 & 0 \\ \sin(\theta_6) & \cos(\theta_6) & 0 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}
$$

$$
{}^0T_3 = \begin{pmatrix} \sin(\theta_2)(-\cos(\theta_1))\cos(\theta_3) - \sin(\theta_3)\cos(\theta_1)\cos(\theta_2) & \sin(\theta_2)\sin(\theta_3)\cos(\theta_1) - \cos(\theta_1)\cos(\theta_2)\,c \\ \sin(\theta_1)\sin(\theta_2)(-\cos(\theta_3)) - \sin(\theta_1)\sin(\theta_3)\cos(\theta_2) & \sin(\theta_1)\sin(\theta_2)\sin(\theta_3) - \sin(\theta_1)\cos(\theta_2)\,c \\ \cos(\theta_2)\cos(\theta_3) - \sin(\theta_2)\sin(\theta_3) & \sin(\theta_2)(-\cos(\theta_3)) - \sin(\theta_3)\cos(\theta_2) \\ 0 & 0 \end{pmatrix}
$$