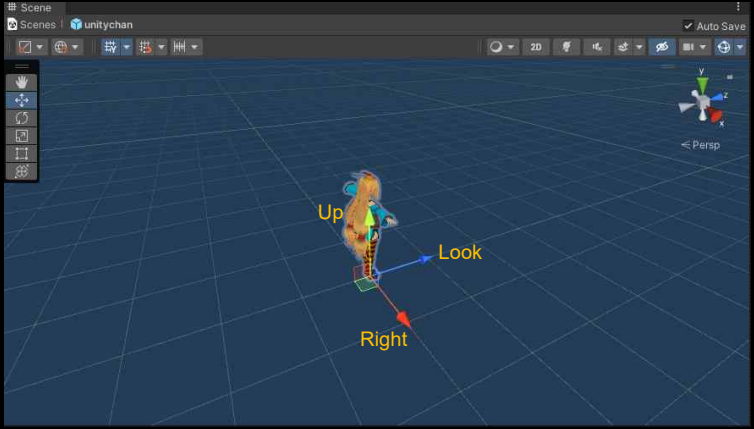
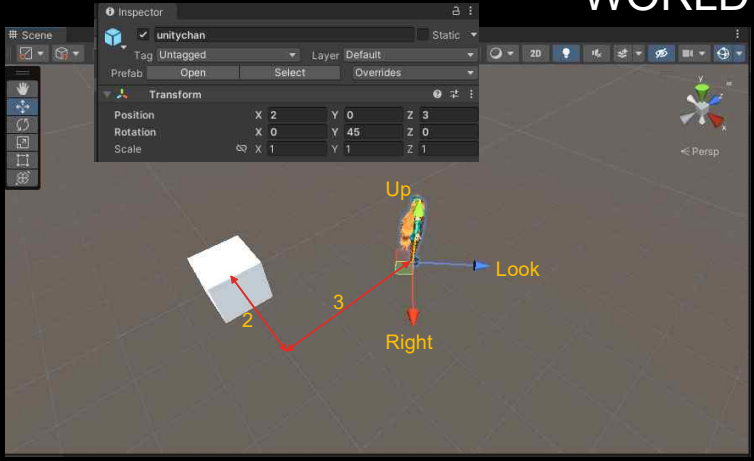
WORLD 변환 행렬

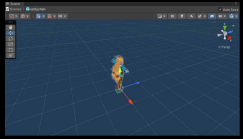
LOCAL SPACE

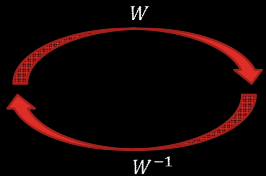


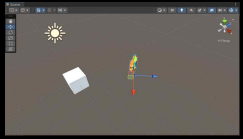
WORLD SPACE

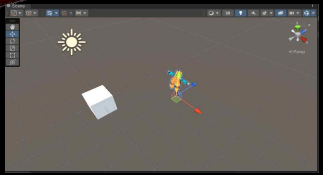

Inspector
unitychan
Static
Tag Untagged
Layer Default
Prefab Open Select Overrides
Transform
Position X 2 Y 0 Z 3
Rotation X 0 Y 45 Z 0
Scale X 1 Y 1 Z 1
Scene
2D
Persp
Up
Look
Right
2
3

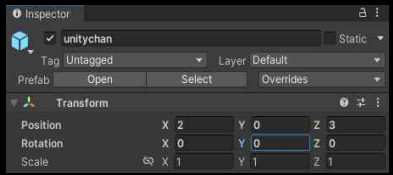
WORLD MATRIX



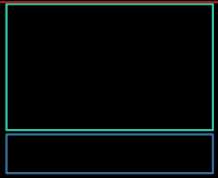






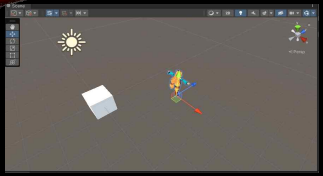


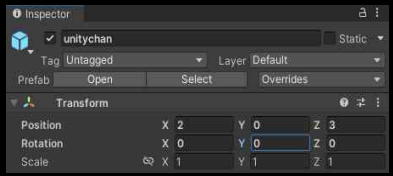
$$\vec{v} = [x \quad y \quad z \quad 1]$$



(B 좌표계 기준) A의 좌표

$$\vec{V} = [X \quad Y \quad Z \quad 1]$$

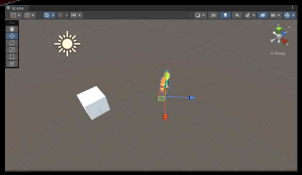


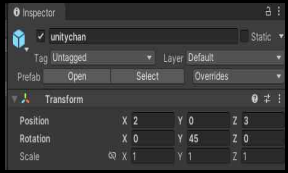


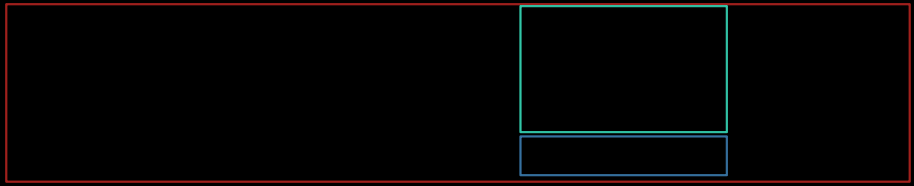
$$\vec{v} = [x \quad y \quad z \quad 1] \qquad M = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 2 & 0 & 2 & 1 \end{bmatrix}$$

(B 좌표계 기준) A의 좌표

$$\vec{V} = [X \quad Y \quad Z \quad 1]$$




Inspector
unitychan
Static
Tag Untagged
Layer Default
Prefab Open Select Overrides
Transform
Position X 2 Y 0 Z 3
Rotation X 0 Y 45 Z 0
Scale X 1 Y 1 Z 1



(B 좌표계 기준) A의 좌표

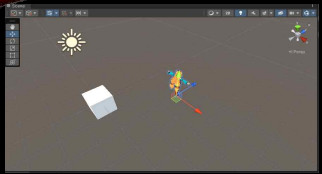
ROTATION

$$R_x(\phi) = \text{Roll}(\phi) = \begin{bmatrix} 1 & 0 & 0 \\ 0 & \cos\phi & -\sin\phi \\ 0 & \sin\phi & \cos\phi \end{bmatrix}$$

$$R_y(\theta) = \text{Pitch}(\theta) = \begin{bmatrix} \cos\theta & 0 & \sin\theta \\ 0 & 1 & 0 \\ -\sin\theta & 0 & \cos\theta \end{bmatrix}$$

$$R_z(\psi) = \text{Yaw}(\psi) = \begin{bmatrix} \cos\psi & -\sin\psi & 0 \\ \sin\psi & \cos\psi & 0 \\ 0 & 0 & 1 \end{bmatrix}$$

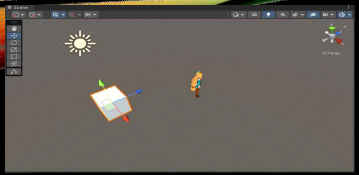
Rotation

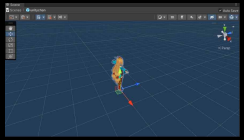


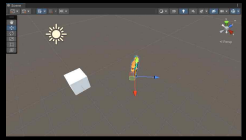
$$\overrightarrow{Right} = [1 \quad 0 \quad 0 \quad 0]$$

$$M = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 2 & 0 & 2 & 1 \end{bmatrix}$$

$$\vec{V} = [X \quad Y \quad Z \quad 1]$$







Scale

Rotation

Translation