A17 – Animation and interpolation

In this assignment, you should provide the procedure that creates the transform matrix that transform the position and the rotation of one object, with linear interpolation between two frames. The application is contained in `index.html` and the procedure for defining the transform matrix is in file `interp.js`.
The procedure receives 13 parameters defining the position, the rotation in the initial and final frame, and the linear interpolation factor. Parameters *tx1*, *ty1* and *tz1* contain the translation displacements of the first frame (respectively *tx2*, *ty2* and *tz2* for the last frame). Rotations are defined using Euler angles, and contained in *rx1*, *ry1*, *rz1*, *rx2*, *ry2* and *rz2*. Last parameter *a* is the interpolation value, 0 <= alpha <= 1, used for the interpolation.

The slider at the bottom allows to vary the frame rate, increasing or decreasing the animation speed.