Farhad Kamangar kamangar@uta.edu

Assignment 02 (Due date Oct. 6, 2024)

Computer Graphics Assignment 02

DUE DATE: Oct. 6, 2024 11:59 PM

Purpose:

Practice in

- 3-dimensional composite transforms.
- 2-dimensional window to viewport mapping

Task:

Add the following commands to Assignment_01. Your program should be able to read from an input file and display data (same as Assignment_01).

- **Rotate around line AB by D degrees in 100 incremental steps**
  This command rotates all the objects around line AB by **D** degrees in **100** incremental steps (coordinates of points A and B are specified by the user). The intermediate results should be displayed
- **Scale Sx, Sy, Sz around point Ax,Ay,Az in 100 incremental steps**
  This command scales all the objectsaround point A(x,y,z) by **Sx**, **Sy**, and **Sz** in **100** incremental steps. The intermediate results should be displayed

Translate Tx, Ty, Tz, 100
This command translates all the objects by Tx, Ty, and Tz in **100** incremental steps. The intermediate results should be displayed

Sample data files:

- Pyramid
- Cow

- Teapot

Demo solution of Assignment_02

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