

# Computer Graphics: Assignment 04

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## 1 Euler Angles and even more Transformations

- Set *sun* to coordinate center
- PushMatrix()
  - Rotate *sun* about angle  $\phi_{sun}$  around y-axis
- popMatrix()
- PushMatrix()
  - Rotate *earth* about  $\frac{360}{365}$  around y-axis
  - Translate *earth* and *moon* about  $dist_{earth-sun}$
  - PushMatrix()
    - \* Rotate *earth* about 23.5 around z-axis
    - \* Rotate *earth* about  $\phi_{earth}$  around y-axis
  - PopMatrix()
  - PushMatrix()
    - \* Rotate *moon* about  $\frac{360}{12}$  around y-axis
    - \* Translate *moon* about  $dist_{moon-earth}$
  - PopMatrix()
- popMatrix()