

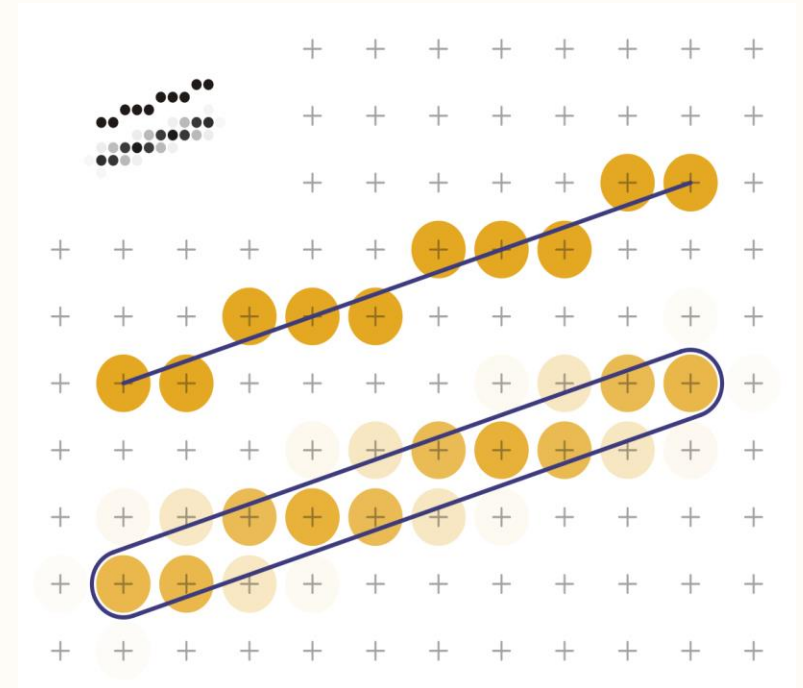
# Overview of the Semester

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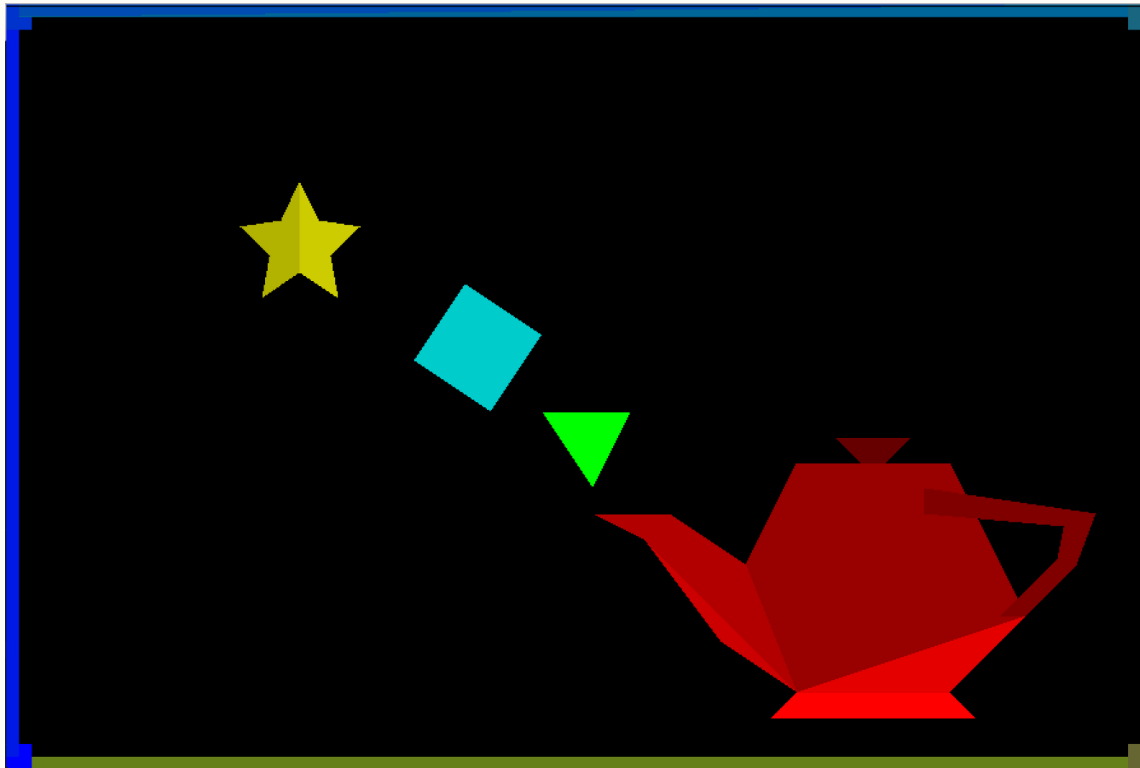
# Scan-line conversion algorithms

- Line Drawing Algorithms
  - DDA
  - Midpoint
  - Midpoint with eight way symmetry
- Circle Drawing Algorithm
  - Midpoint
- Polygon Filling Algorithm



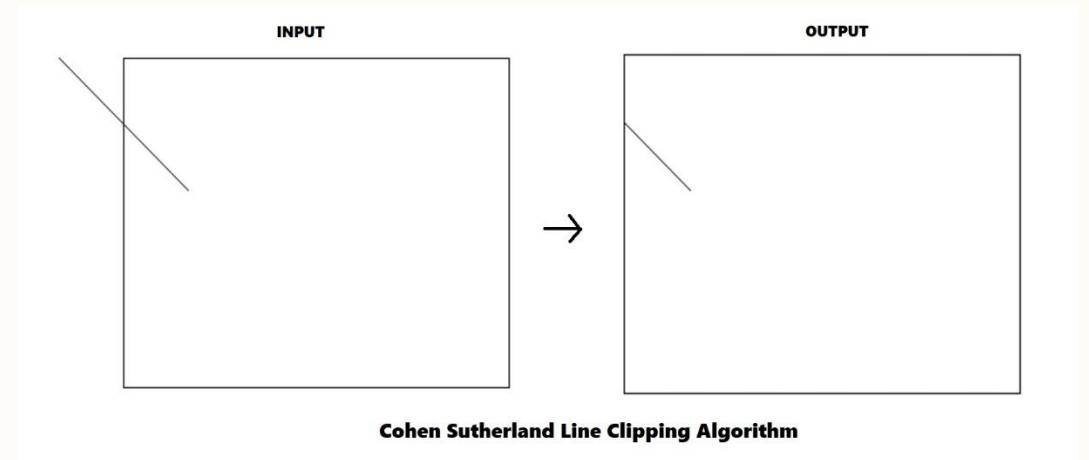
# Scan-line polygon filling algorithm

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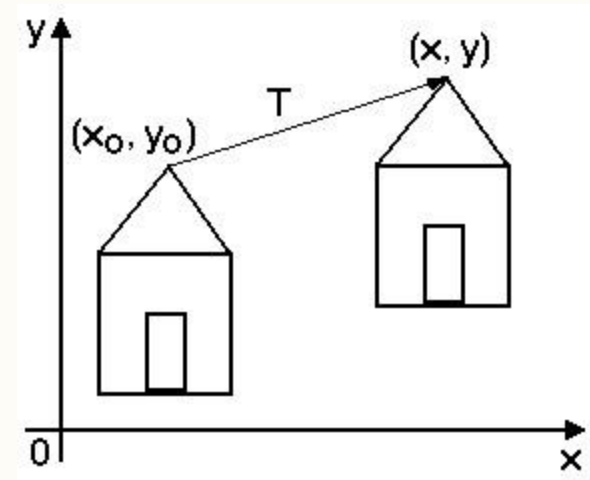
# Clipping algorithms

- Line clipping algorithms
  - Cohen-Sutherland
  - Cyrus-Beck
- Polygon clipping algorithm
  - Sutherland-Hodgman



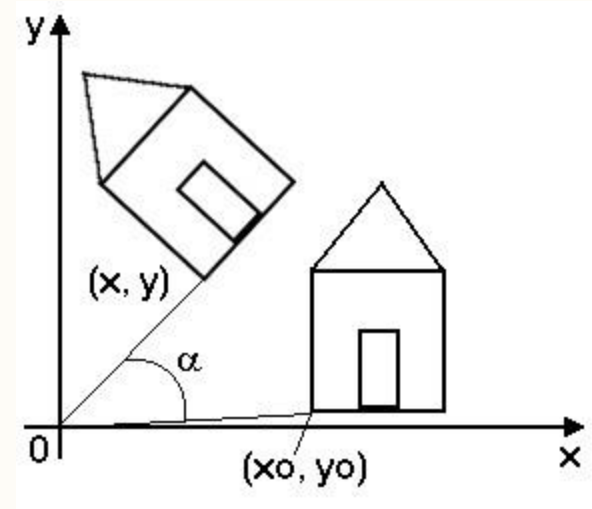
# Transformation

- Translation



# Transformation

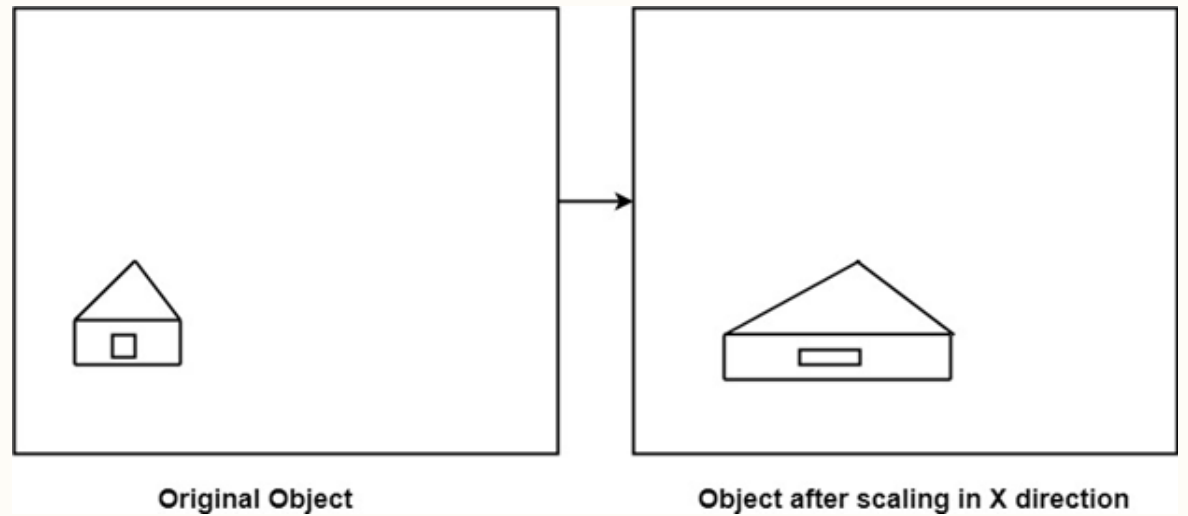
- Rotation



# Transformation

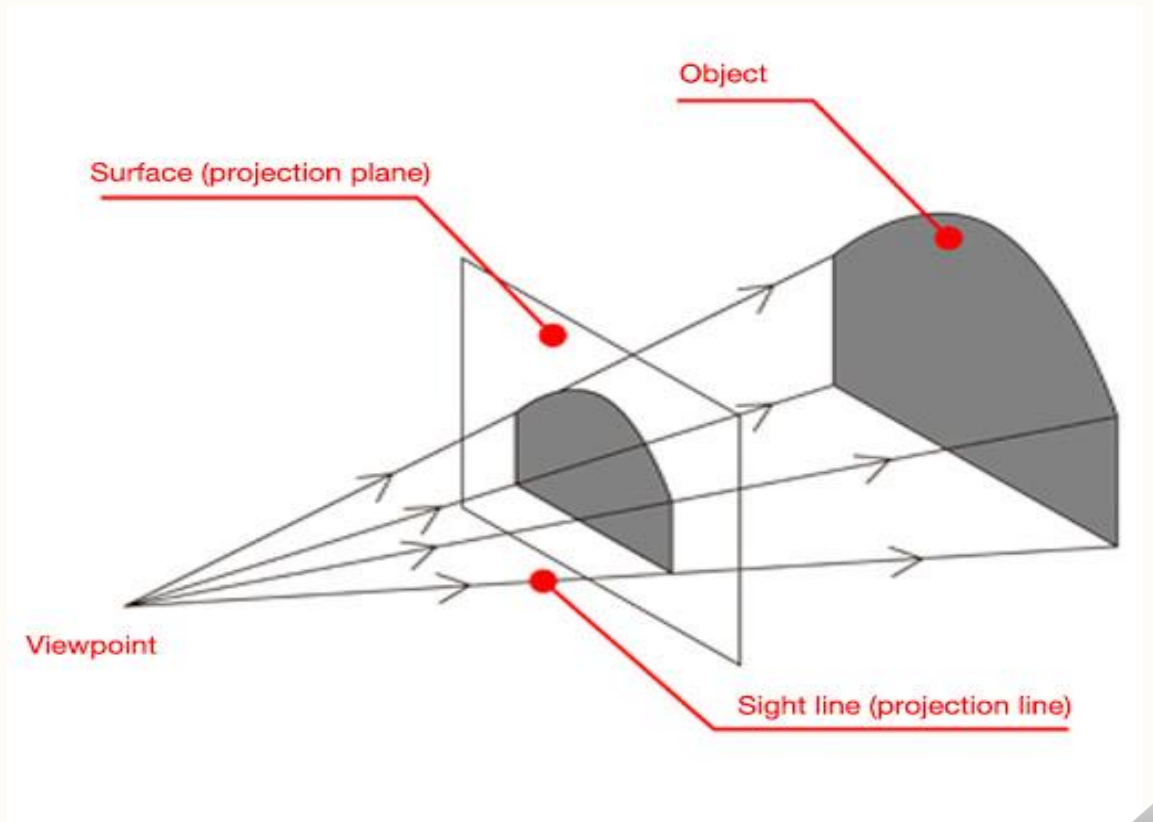
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- Scaling



# Projection

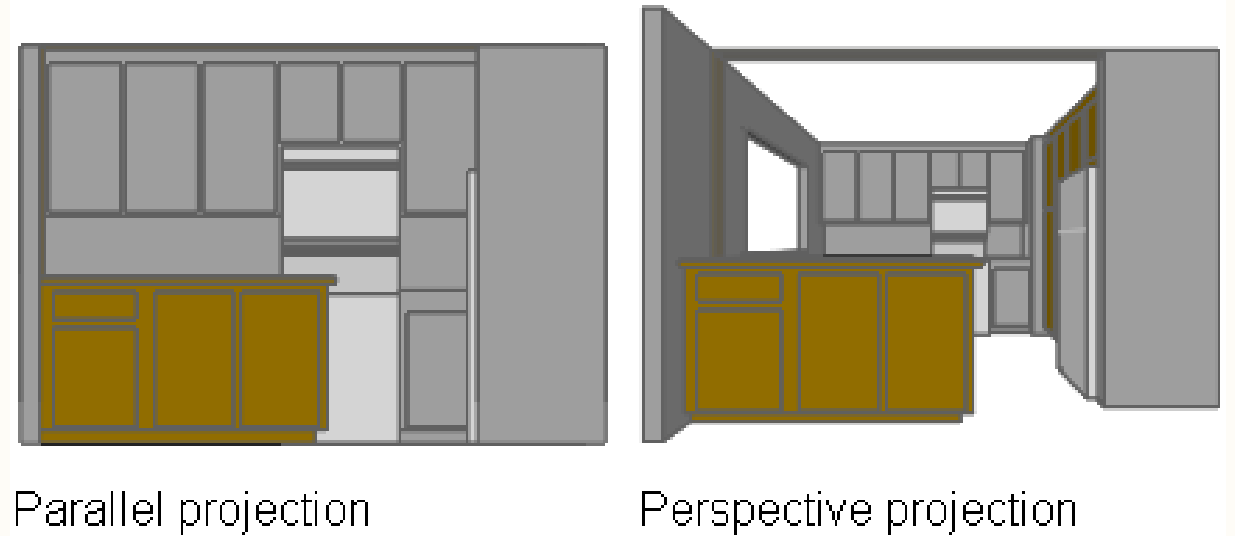
- Perspective projection





# Projection

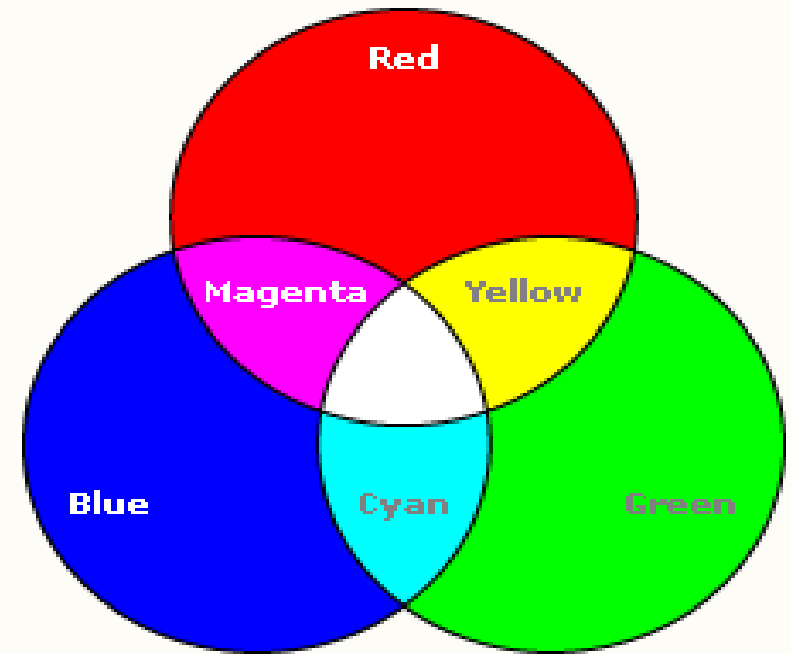
- Parallel projection



# Color models

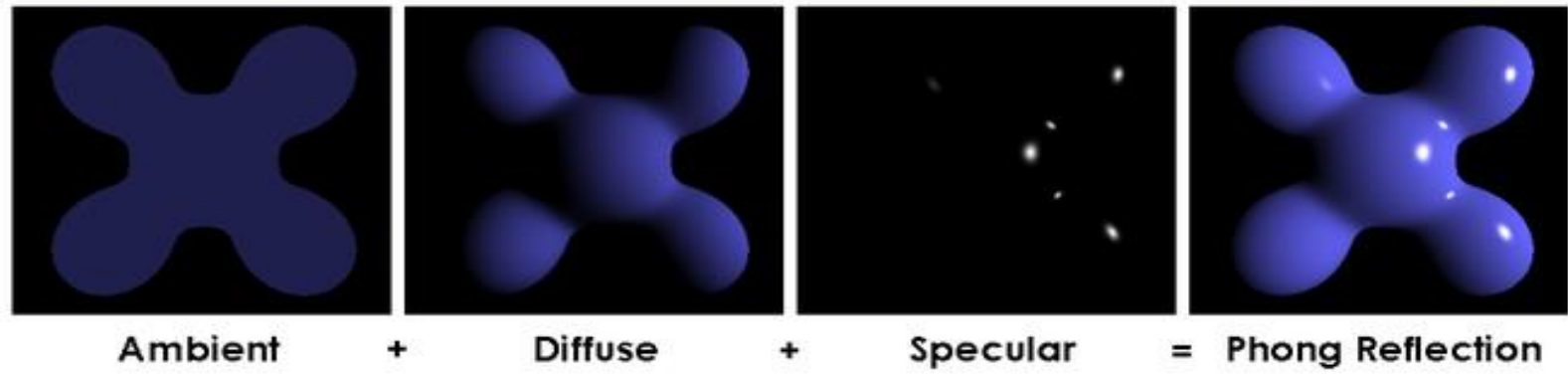
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- RGB
- HSV
- HSL



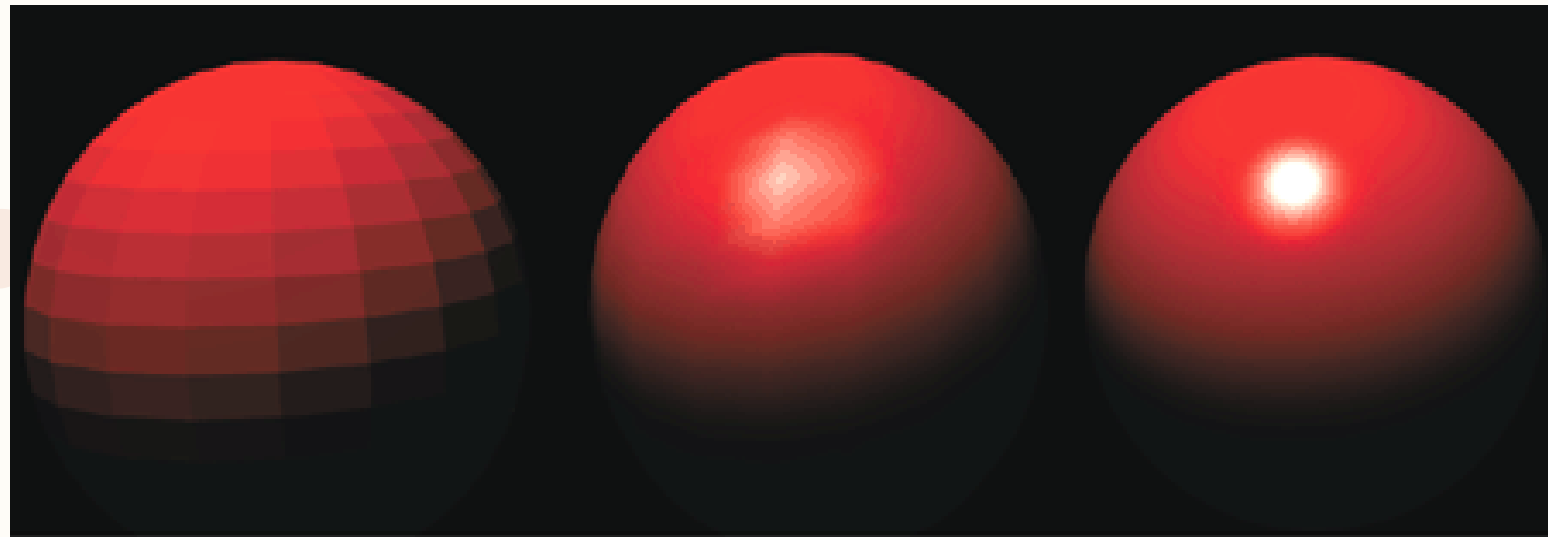
# Illumination models

- Global illumination
- Diffuse reflection



# Shading

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Flat

Gouraud

Phong



# Curves & Splines

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