Milestone 3: SeeGOL

(Shoyler's Extremely Experimental Graphical Operating Library)

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The Premise

(Recap)

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In an alternative universe...

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A monument to compromise

16-bit 8086

32-bit i386+
(with 16-bit Real Mode)

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Project So Far

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Stage 3:
Graphics Library

- Significant progress has been made
- GL and Pane packages provide user-level graphics control
  - Driver-independent
- User has limited access to the hardware
  - + User has an easier time producing graphical entities
  - - User doesn’t have as much control

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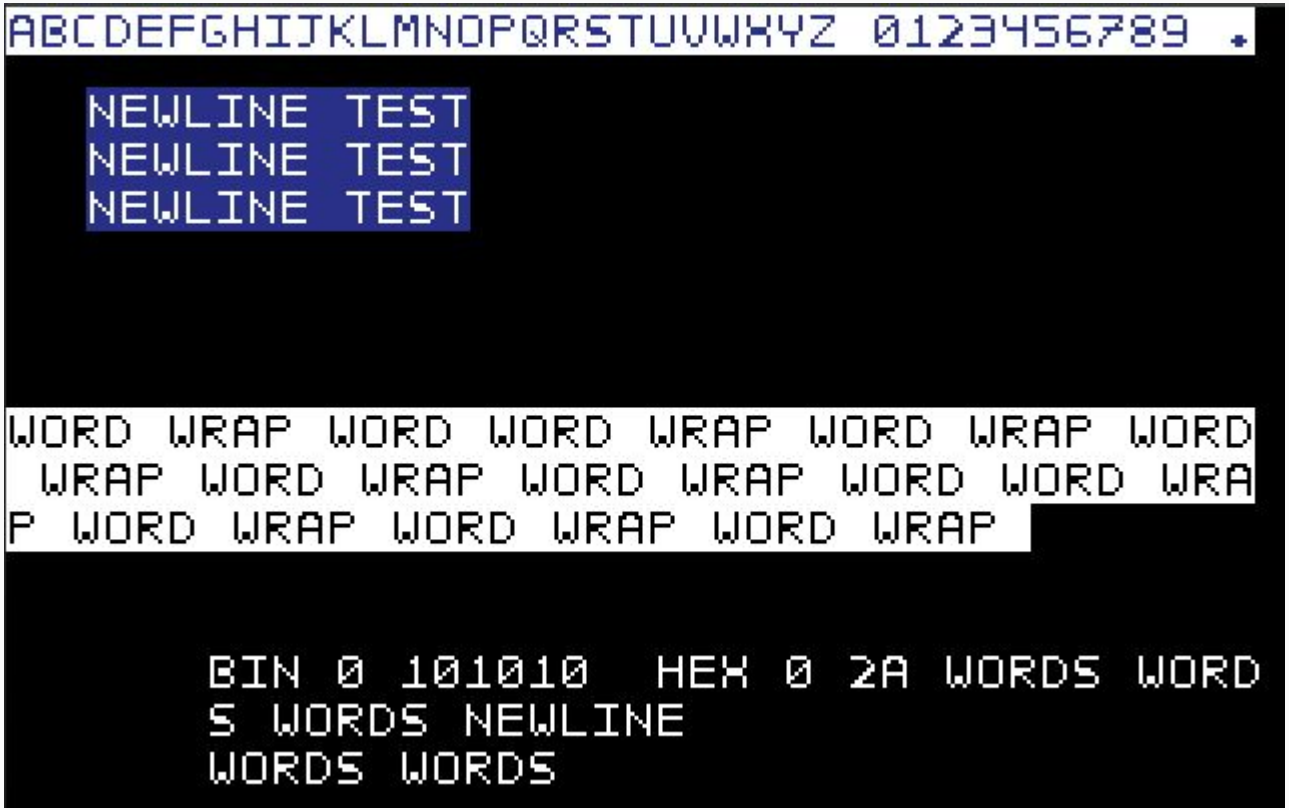
Font Rendering



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Panes

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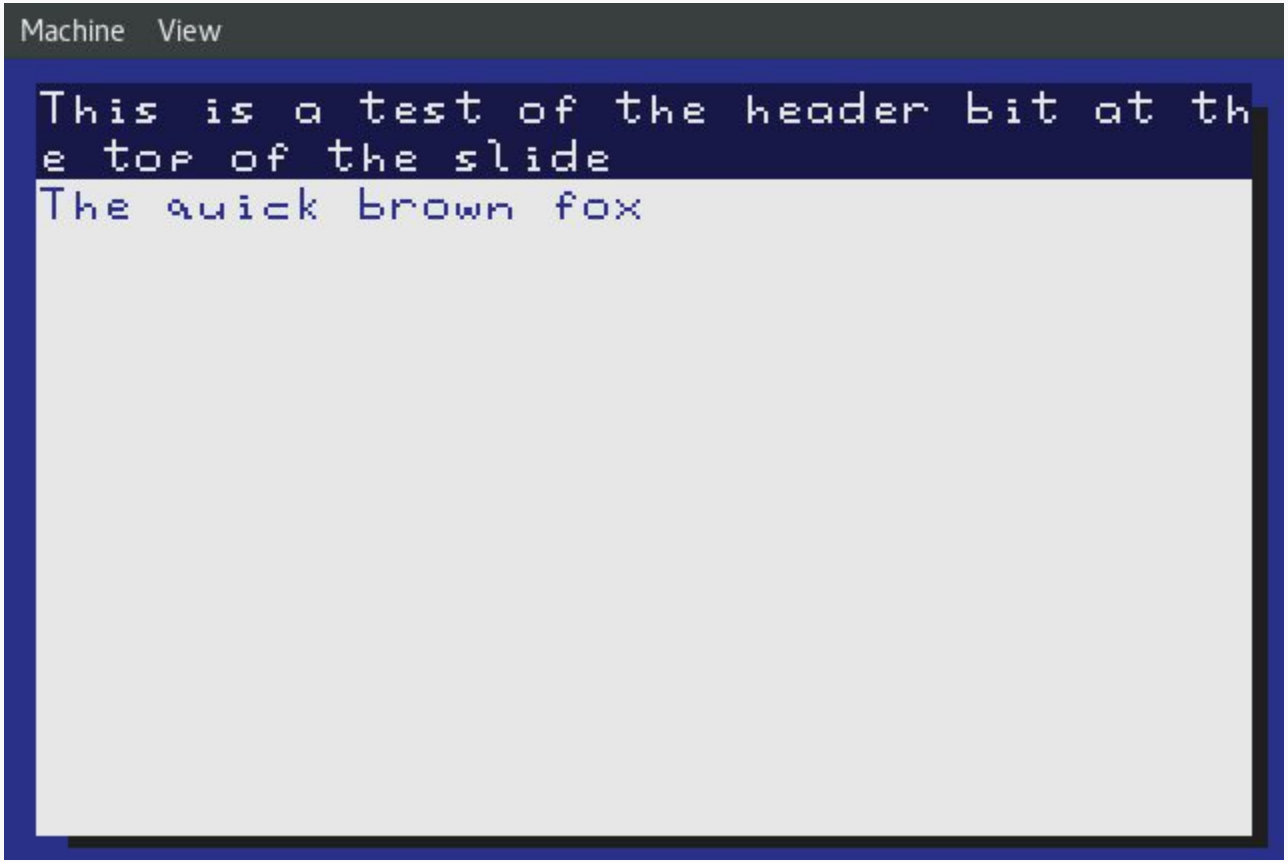
Panes



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Panes

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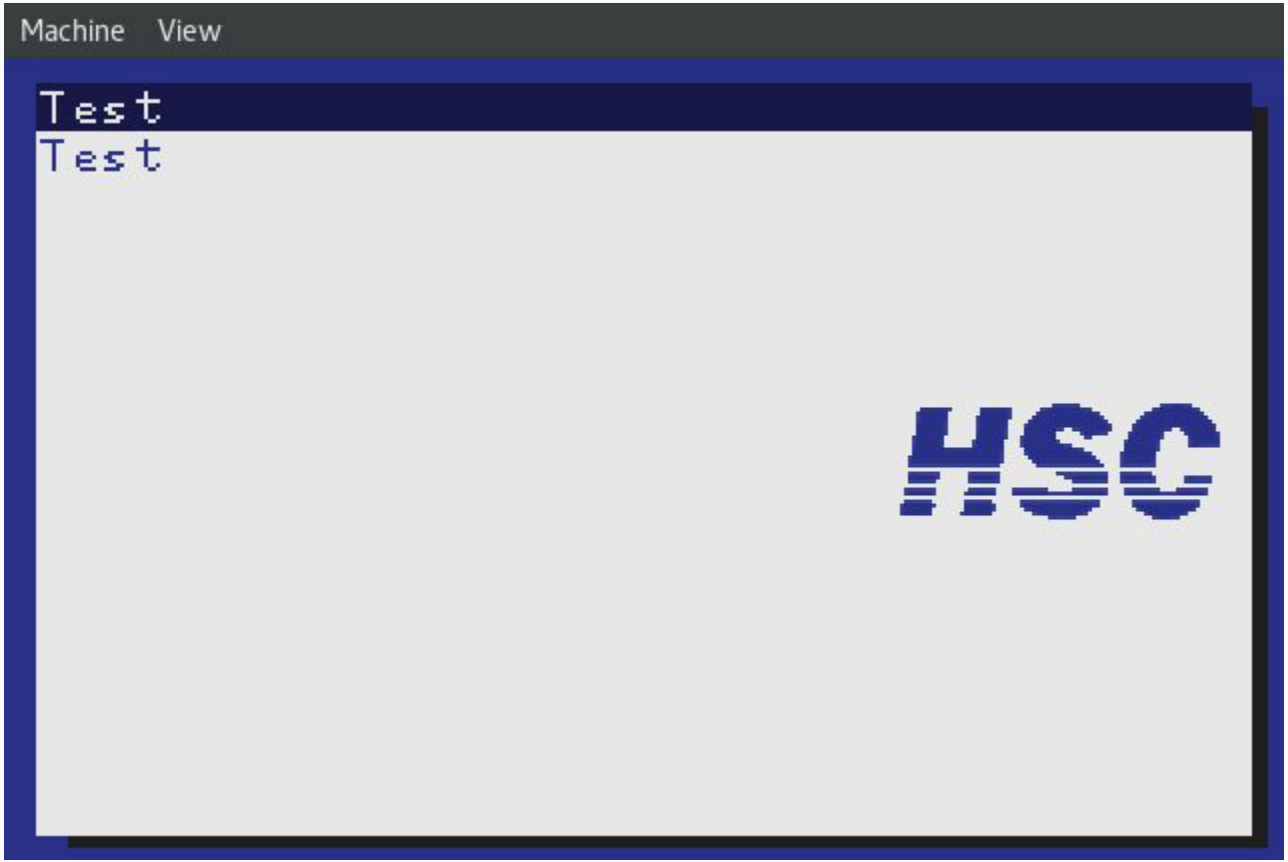
Panes



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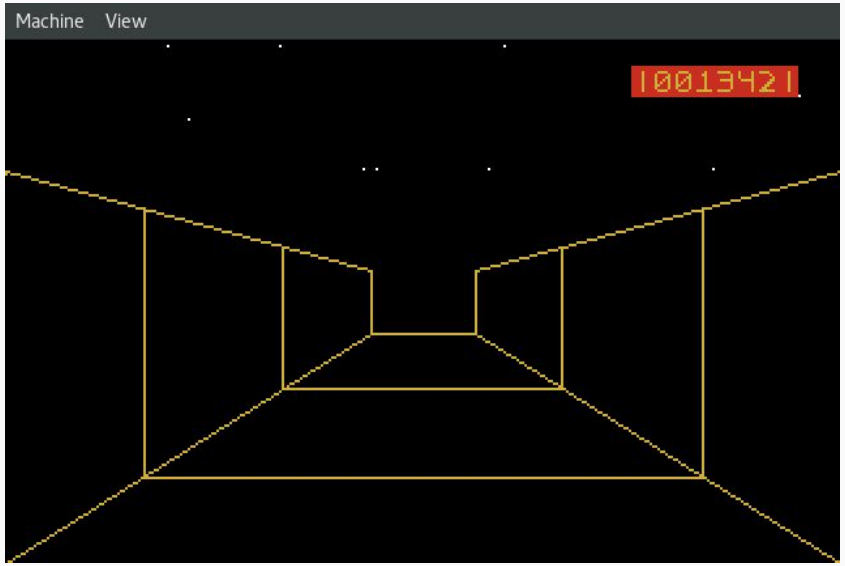
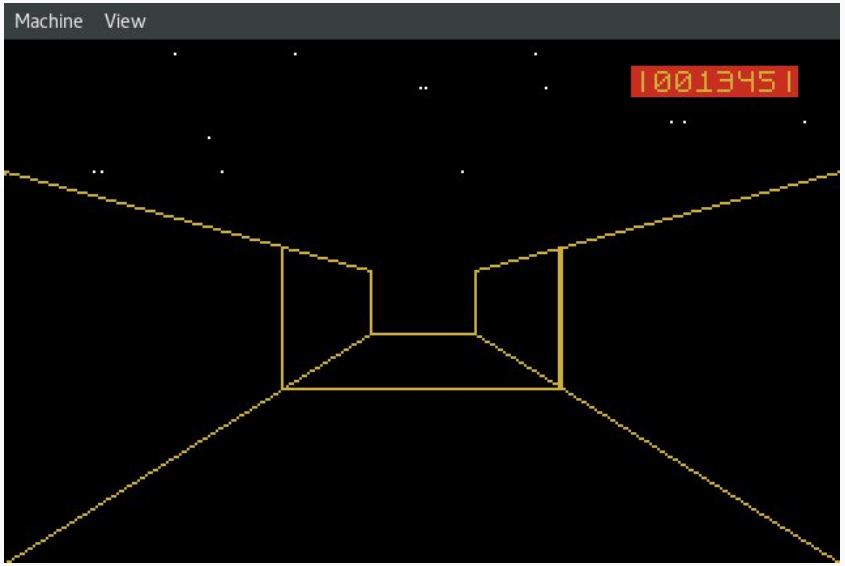
Procedurally Generated Line Drawing Example





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Evolution of a Test Pattern

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Original Test Image, Drawn with Rectangles

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Adding Programmable VGA 13 Color Pallette

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Macbeth Color Chart Comparison

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Adding Text Rendering

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Adding Image Rendering

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Sources

[1] Image content comes from freely available online resources

[2] Diagrams and Code Snippets by Schuyler Martin

[3] HSC Logo created by Kailey Martin

[4] List of resources that were deemed helpful while making this project:
https://github.com/schuylermartin45/seegol/blob/master/docs/links.txt

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Special Thanks

[1] Prof. Warren Carithers - Advisor
Warren, taught me almost everything I know about Systems Programming and Computer Graphics. Without him, none of this would be possible.

[2] Prof. Sean Strout - Mentor
Sean is a close friend of mine and initially sparked a lot of my interest in becoming a C wizard.

[3] Prof. Thomas Kinsman - Mentor
Thomas has taught me how to think creatively with visual problems

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Questions?

Project available at https://github.com/schuylermartin45/seegol

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