

## Programming Project 2: Painter Language

This project is due Tuesday 7/19 at 11:59pm and must be done individually. Please check the course website for updates and errata.

This project consists of all the exercises in Abelson & Sussman, Section 2.2.4 (exercises 2.44-2.52) You can't actually draw anything until you finish the project! To begin, copy the file `~cs61a/lib/picture.scm` to your directory. To draw pictures, once you have completed the exercises:

```
> (cs)
> (ht)
> (===your-painter=== full-frame)
  For example:
> (wave full-frame)
> ((square-limit wave 3) full-frame)
```

**Submission Instructions:** In a directory named 'proj2', create files called 'picture.scm' (which should contain your code) and 'testing.txt' (which should include an explanation of your testing and your transcripts – please surround your transcripts with real English words so that the readers can figure out what you are trying to do). Type 'submit proj2' at the shell prompt. Also, please submit paper copies of both these files to the homework box.

In addition to the foregoing, please observe the following:

For Exercise 2.47:

- a. Include the constructor 'make-frame' in your code
- b. Name the selectors 'origin-frame', 'edge1-frame', 'edge2-frame'.

For Exercise 2.49:

- a. Call this painter 'outline'
- b. Call this painter 'drawX'
- c. Call this painter 'diamond'
- d. Call this painter 'wave'

For Exercise 2.50:

- a. Name the transformations 'flip-horiz', 'rotate180', and 'rotate270'.

For Exercise 2.51:

- a. Call one version of below 'below' and the other 'below2'

For Exercise 2.52:

- a. Call this painter 'wave2'
- b. Call this painter 'corner-split2'
- c. Call this painter 'square-limit2'