

Cellular Automata

The goal of the presentation is to discuss the λ calculus.

- http://en.wikipedia.org/wiki/Lambda_calculus

Your presentation should include a discussion of

- What the λ calculus is
- An explanation of α -conversion, β -reduction, η -conversion.
- An explanation of how to encode a several valued function by a single valued function
- How to define the natural numbers in the λ calculus
- A discussion of how a function is computable if and only if there is a λ -expression for it.

You should also feel free to expand on the above in any directions you would like (so long as they are related to the topic and not directly covered in class).

If you have any questions regarding the presentation feel free to e-mail your TA or Dr. Ackerman