

```
(base) C
1 1
1 1
1 1
1 1
1111
1111
1
1
1
1111
1
1
1
1
1111
11
=====
1 1
1 1
1 1
1111
1111
1
1
1
1111
1
1
1
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1111
11
1 1
=====
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1111
11
1 1
1111
```

I did implement basic functionality for the algorithm. It can now take a message and output the on/off sequence of each pixel. This is functional but the method used to create the scrolling function could use some work. For example, if the message was "UCLA", the current implementation would start the first frame (depending on the height of a user-specifiable window) with all of the U and part of the C showing. However, I would like it to start with a blank frame and the first row of the U come up and so on until the entire U was shown.

The figure on the left shows the terminal output showing the first few frames using the 4x5 character set and the message “UCLA 2020!” with window size 4x19. This example produced 76 CSV files – one for each pixel. An example CSV file is below: