

Assignment 7: 10 Print NES Remake

DUE November 10th at 11:59 PM

In this lab we will remake 10 PRINT for the NES. Here are the three most relevant example programs on 8bitworkshop:

1. [Name Tables](#)
2. [Scrolling](#)
3. [Input](#)

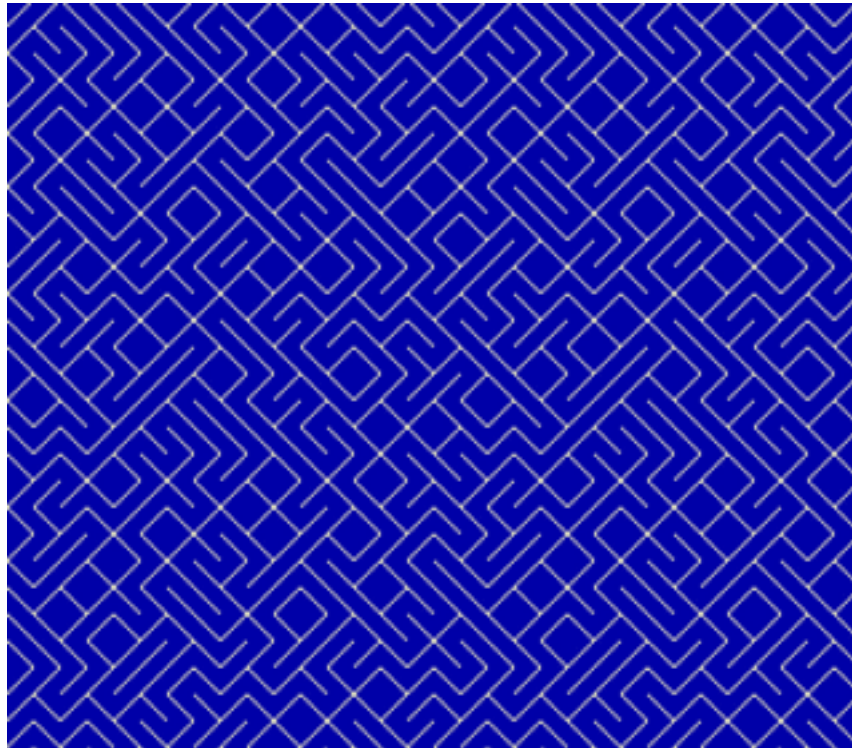


Figure 1: 10 print scrolling

1 WARMUP: NES C-API

1. How are `vram_adr` and `vram_put` used together?
2. How are `vram_put` and `vram_write` different?
3. When should you use `vrambuf_put` rather than `vram_put`?

NOTE: We'll use the [neslib library](#), functions like `rand8()` will be useful for this project; more docs [here](#).

2 NES 10PRINT

You are free to interpret the remake as you wish, but it must at least use a name table to create a scrolling 10PRINT image. Run the demos using `/usr/games/fceux` and examine the name and pattern tables.

0. Fill a nametable with the maze pattern ([demo](#)).
1. Implement scrolling ([demo](#)):
 - use the `scroll` neslib function and the two A&C nametables, or;
 - use your own buffer strategy with a single nametable, or;
 - use the [vram-buffer technique](#) ([demo](#)).

Additional challenges:

- Use a different color palette ([demo](#)).
- Respond to the gamepad in some fashion (e.g., move the maze up or down, or left to right) ([demo](#)).

3 Demake

- Chat with Keith about your demake ideas.
- Start working on your nametable background tiles.
- If you aren't a fan of 8-bit workshop (the emulator isn't as good as `fceux`), I've included an example project you can use to work entirely via the command-line.

4 Deliverables

1. Commit the c-source file to the repo (`10print.c`).
2. Write a small reflection (as a markdown document) about what you were able to accomplish in this mini-lab.
3. Also include a link to your 8bitworkshop project in the markdown document (link can be retrieved in the `share` menu).
4. Write a little about what you'd like to do in the demake project.