

Since VA (new target set flag) is always FF after a scoring routine (because the target is off), I use VA to test for a press of Key "F" to restart the game. (The restart feature is at location 0374.) "Tricks" like this can cause bugs, and it's better to initialize a variable before it is used rather than assuming it has any particular value in it. (The CHIP-8 Interpreter does this fairly often, and could be criticized for it - although, for the extreme condensation of the language, this and other "dangerous tricks" were necessary and desirable tradeoffs.)

Because the game is over at this point, I think I'm safe, but a later change in the use of VA could disable the restart feature. A general rule for your programming is to keep the individual parts as loosely connected as possible - don't share values of things or set parameters in one routine for use in another. Your program may not run any differently, but the debugging process will go more smoothly. For instance, I usually set "I" with an AMMM instruction immediately prior to a DXYN (display) instruction, even though it may have been set properly by a previously routine. This is because I might someday (when I'm revamping the program, for example) want to jump into this part of the program from another routine which does not leave "I" properly set...and I don't want to have to chase down the "garbage" that might appear on the screen while I'm busily being creative!

Just in case you have any trouble, I have included checksum data to help you determine whether the code is properly entered. See the VIPER, November, 1978, for instructions on how to use the checksum data. The program must be entered exactly as listed, with all unused memory locations set to zero except where noted with NOP (no operation) lines.

I hope you enjoy Surround - and are willing to get your fingers a little "dirty" by experimenting with some of the mods I've suggested. Have fun!