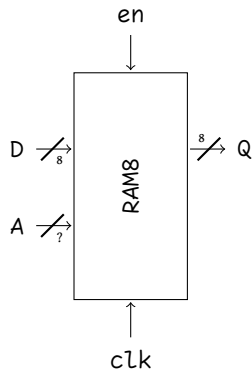
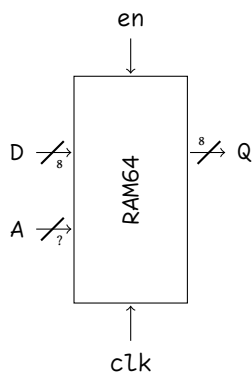


Use *Digital* to construct the following **synchronous** gates.

1. Using only the built in Byte (or Register set to 8 bits), and whatever combinatorial gates you want, build a RAM8, a memory with 8 addressable bytes. The address line(s) determine which of the eight bytes are presented on Q and which byte will latch D (on a rising clock signal while en is asserted).



2. Using as many of your RAM8 as you like, and whatever combinatorial gates you need, build a RAM64, a memory with 64 addressable bytes. The address, load and clock serve the same sort of purpose as in RAM8. **Note:** think about the *number* of address lines coming in to the RAM64 and *how many* each RAM8 needs to do its job.



**Deliverables:** When all the circuits are tested and working, put them into a git repository (no need for a README here) and submit them through Gitea at <https://cs-devel.potsdam.edu>.