LAB 6. 8-to-1 Multiplexer

We will be building another major component of our processor this week, the register file. There are 5 labs, an 8-to-1 mux, its 16-bit version, a loadable register with set and reset, a special 16-bit version, and finally the register file itself.

In this first lab, we will build a 1-bit 8-to-1 mux. When Select[2:0] is 000, A should be sent to Z, and so on. When Select[2:0] is 111, H should be sent to Z.

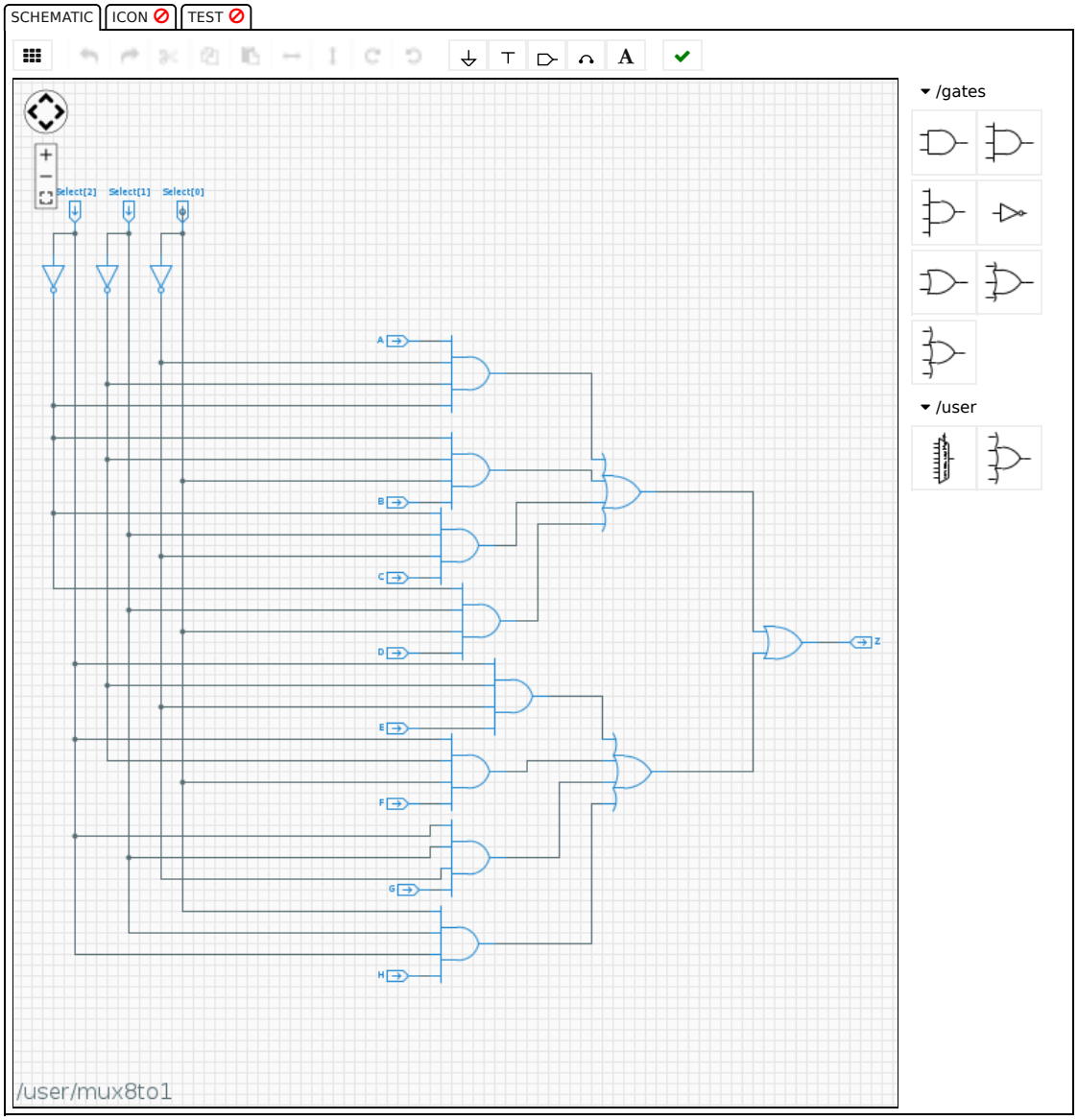
Design your 8-to-1 mux with the provided gates in the parts bin. You may use your "/user/or4" if you load it. There is also an or4 in the parts bin.

The icon for this circuit, "/user/mux8to1", appears in the parts bin. Don't use that or you'll get a "recursive inclusion of module" error!

Test it, save it, and submit it to edX via the check button. The next lab will be the 16-bit version.

8-TO-1 MULTIPLEXER (1/1 point)

Module: /user/mux8to1



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