Physics 623: HW 8

Do the following Exercises from Horowitz & Hill (Third Edition):

10.2,
10.3,
10.5,
10.6,
10.8,
10.9,
10.11,
10.16,
10.21 The problem is under-specified in H&H, since it doesn't tell you what to do if more than one input is high. The usual requirement is for a "priority encoder". If more than one input is high, only the output should correspond to the highest priority input that is high. Priority order is ABCD. There's also no output combination available for a 0 0 0 0 input, so just make it 0 0 (same as for A). This is usually solved by having 15 inputs and a 4-bit output. Here could have added a "none of the above" output.